
Appendix C: One-hour and Eight-hour County Design Values

Appendix C: One-Hour and Eight-Hour County Design Values

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Table C-1. Areas formally designated as nonattainment areas for ozone under the 1-hour NAAQS, outside California, as of August 10, 1998.¹

Areas Listed Alphabetically	Classification	1990 Popu- (1000) or MSA?	Located in a CMSA
Atlanta, GA	Serious	2,654	msa
Baltimore, MD	Severe-15	2,348	msa
Baton Rouge, LA	Serious	559	msa
Beaumont-Port Arthur, TX	Moderate	361	msa
Birmingham, AL	Marginal	751	msa
Boston-Lawrence-Worcester (E. MA), MA-NH	Serious	5,505	cmsa
Chicago-Gary-Lake County, IL-IN	Severe-17	7,886	cmsa
Cincinnati-Hamilton, OH-KY	Moderate	1,705	cmsa
Dallas-Fort Worth, TX	Serious	3,560	cmsa
Door Co, WI	Marginal	26	neither
El Paso, TX	Serious	592	msa
Greater Connecticut	Serious	2,470	cmsa
Houston-Galveston-Brazoria, TX	Severe-17	3,731	cmsa
Kent & Queen Anne's Co.s, MD	Marginal	52	part
Lancaster, PA	Marginal	423	msa
Louisville, KY-IN	Moderate	834	msa
Manitowoc Co, WI	Moderate	80	neither
Milwaukee-Racine, WI	Severe-17	1,735	cmsa
Muskegon, MI	Moderate	159	msa
New York-N. New Jersey-Long Island, NY-NJ-C	Severe-17	17,651	cmsa
Philadelphia-Wilmington-Trenton, PA-NJ-DE-M	Severe-15	6,010	cmsa
Phoenix, AZ	Serious	2,092	msa
Pittsburgh-Beaver Valley, PA	Moderate	2,468	cmsa
Portland, ME	Moderate	441	msa
Portsmouth-Dover-Rochester, NH	Serious	183	msa
Providence (All RI), RI	Serious	1,003	cmsa
Springfield (Western MA), MA	Serious	812	msa
St Louis, MO-IL	Moderate	2,390	msa
Sunland Park, NM (New Area 1995)	Marginal	8	msa
Washington, DC-MD-VA	Serious	3,924	msa

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Table C-2. Metropolitan areas and rural counties with 1995-1997 measured design values exceeding the 1-hour standard.

Name of metropolitan area or rural county	Design Value (ppb)	1990 Population
Manitowoc WI	126	80,421
Door WI	127	25,690
Jefferson TN	125	33,016
Mason MI	125	25,537
Kent MD	129	17,842
Sagadahoc ME	125	33,535
Iberville LA	139	31,049
La Porte IN	146	107,066
Atlanta, GA MSA	145	2,959,500
Barnstable-Yarmouth, MA MSA	131	134,954
Baton Rouge, LA MSA	131	528,261
Beaumont-Port Arthur, TX MSA	139	361,218
Birmingham, AL MSA	132	839,942
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	138	5,455,403
Chicago-Gary-Kenosha, IL-IN-WI CMSA	129	8,239,820
Cincinnati-Hamilton, OH-KY-IN CMSA	125	1,817,569
Dallas-Fort Worth, TX CMSA	139	4,037,282
Grand Rapids-Muskegon-Holland, MI MSA	137	937,891
Hartford, CT MSA	144	1,157,585
Houma, LA MSA	127	182,842
Houston-Galveston-Brazoria, TX CMSA	189	3,731,029
Kansas City, MO-KS MSA	128	1,582,874
Lancaster, PA MSA	125	422,822
Longview-Marshall, TX MSA	139	193,801
Louisville, KY-IN MSA	125	949,012
Memphis, TN-AR-MS MSA	131	1,007,306
Milwaukee-Racine, WI CMSA	127	1,607,183
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	157	19,549,649
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	152	5,893,019
Pittsburgh, PA MSA	133	2,394,811
Providence-Fall River-Warwick, RI-MA MSA	133	1,134,350
St. Louis, MO-JL MSA	131	2,492,348
Springfield, MA MSA	132	587,884
Washington-Baltimore, DC-MD-VA-WV CMSA	145	6,726,395

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Table C-3. Metropolitan areas and rural counties with 1995-1997 measured design values exceeding the 8-hour standard.

Name of metropolitan area or rural county	Design Value (ppb)	1990 Population
Manitowoc WI	95	80,421
Kewaunee WI	93	18,878
Door WI	92	25,690
Madison VA	86	11,949
Jefferson TN	96	33,016
Chester SC	87	32,170
Franklin PA	86	121,082
Preble OH	86	40,113
Logan OH	86	42,310
Knox OH	91	47,473
Clinton OH	97	35,415
Northhampton NC	86	20,798
Haywood NC	85	46,942
Granville NC	94	38,345
Caswell NC	89	20,693
Jefferson NY	88	110,943
Essex NY	86	37,152
Ste. Genevieve MO	87	16,037
Mason MI	98	25,537
Cass MI	94	49,477
Benzie MI	88	12,200
Kent MD	96	17,842
Sagadahoc ME	95	33,535
Knox ME	87	36,310
Iberville LA	96	31,049
Livingston KY	86	9,062
Hancock KY	89	7,864
La Porte IN	104	107,066
Sussex DE	93	113,229
Clay AL	86	13,252
Allentown-Bethlehem-Easton, PA MSA	95	595,081
Altoona, PA MSA	90	130,542
Atlanta, GA MSA	110	2,959,500
Augusta-Aiken, GA-SC MSA	87	415,220
Barnstable-Yarmouth, MA MSA	100	134,954
Baton Rouge, LA MSA	95	528,261
Beaumont-Port Arthur, TX MSA	93	361,218

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Table C-3. Metropolitan areas and rural counties with 1995-1997 measured design values exceeding the 8-hour standard.

Name of metropolitan area or rural county	Design Value (ppb)	1990 Population
Benton Harbor, MI MSA	98	161,378
Biloxi-Gulfport-Pascagoula, MS MSA	86	312,368
Birmingham, AL MSA	95	839,942
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	97	5,455,403
Buffalo-Niagara Falls, NY MSA	85	1,189,340
Canton-Massillon, OH MSA	88	394,106
Charlotte-Gastonia-Rock Hill, NC-SC MSA	97	1,162,140
Chattanooga, TN-GA MSA	90	424,347
Chicago-Gary-Kenosha, IL-IN-WI CMSA	96	8,239,820
Cincinnati-Hamilton, OH-KY-IN CMSA	99	1,817,569
Cleveland-Akron, OH CMSA	99	2,859,644
Columbus, OH MSA	92	1,345,450
Dallas-Fort Worth, TX CMSA	104	4,037,282
Dayton-Springfield, OH MSA	93	951,270
Detroit-Ann Arbor-Flint, MI CMSA	92	5,187,171
Dover, DE MSA	94	110,993
Elkhart-Goshen, IN MSA	90	156,198
Erie, PA MSA	87	275,572
Evansville-Henderson, IN-KY MSA	93	278,990
Fayetteville, NC MSA	87	274,713
Fort Wayne, IN MSA	90	456,281
Grand Rapids-Muskegon-Holland, MI MSA	99	937,891
Greensboro--Winston-Salem--High Point, NC MSA	89	1,050,304
Greenville, NC MSA	88	108,480
Greenville-Spartanburg-Anderson, SC MSA	88	830,539
Harrisburg-Lebanon-Carlisle, PA MSA	88	587,986
Hartford, CT MSA	101	1,157,585
Houma, LA MSA	85	182,842
Houston-Galveston-Brazoria, TX CMSA	117	3,731,029
Huntington-Ashland, WV-KY-OH MSA	88	312,529
Indianapolis, IN MSA	97	1,380,491
Jamestown, NY MSA	85	141,895
Janesville-Beloit, WI MSA	85	139,510
Johnson City-Kingsport-Bristol, TN-VA MSA	88	436,047
Johnstown, PA MSA	88	241,280
Kalamazoo-Battle Creek, MI MSA	87	429,453
Kansas City, MO-KS MSA	94	1,582,874
Knoxville, TN MSA	95	585,960

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Table C-3. Metropolitan areas and rural counties with 1995-1997 measured design values exceeding the 8-hour standard.

Name of metropolitan area or rural county	Design Value (ppb)	1990 Population
Lake Charles, LA MSA	85	168,134
Lancaster, PA MSA	96	422,822
Lexington, KY MSA	85	405,936
Lima, OH MSA	89	154,340
Longview-Marshall, TX MSA	91	193,801
Louisville, KY-IN MSA	92	949,012
Memphis, TN-AR-MS MSA	95	1,007,306
Milwaukee-Racine, WI CMSA	98	1,607,183
Nashville, TN MSA	99	985,026
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	108	19,549,649
Norfolk-Virginia Beach-Newport News, VA-NC MSA	87	1,444,710
Owensboro, KY MSA	87	87,189
Parkersburg-Marietta, WV-OH MSA	89	149,169
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	110	5,893,019
Pittsburgh, PA MSA	105	2,394,811
Portland, ME MSA	94	221,095
Providence-Fall River-Warwick, RI-MA MSA	96	1,134,350
Raleigh-Durham-Chapel Hill, NC MSA	89	858,485
Reading, PA MSA	92	336,523
Richmond-Petersburg, VA MSA	90	865,640
St. Louis, MO-IL MSA	100	2,492,348
San Antonio, TX MSA	87	1,324,749
Scranton--Wilkes-Barre--Hazleton, PA MSA	90	638,524
Sharon, PA MSA	92	121,003
Sheboygan, WI MSA	92	103,877
South Bend, IN MSA	91	247,052
Springfield, MA MSA	97	587,884
Steubenville-Weirton, OH-WV MSA	85	142,523
Terre Haute, IN MSA	88	147,585
Toledo, OH MSA	89	614,128
Tulsa, OK MSA	88	708,954
Tyler, TX MSA	89	151,309
Washington-Baltimore, DC-MD-VA-WV CMSA	107	6,726,395
Wheeling, WV-OH MSA	86	159,301
York, PA MSA	87	339,574
Youngstown-Warren, OH MSA	93	600,895

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Table C-4. Metropolitan areas and rural counties with 1995-1997 measured design values within 15% of the 8-hour standard.

Name	Design Value (ppb)	Pop'n.
Simpson KY	83	15,145
Yancey NC	84	15,419
Wythe VA	78	25,466
Pike KY	74	72,583
Rockingham NC	84	86,064
McLean KY	83	9,628
Person NC	84	30,180
Putnam TN	80	51,373
Monroe MO	84	9,104
Walworth WI	83	75,000
Sharkey MS	80	7,066
Macoupin IL	83	47,679
Ulster NY	82	165,304
St Mary LA	81	58,086
Hardin KY	81	89,240
Henry VA	82	56,942
Union SC	81	30,337
Humphreys TN	77	15,795
Graves KY	74	33,550
Lee MS	75	65,581
Pointe Coupee LA	83	22,540
Haywood TN	82	19,437
Lawrence PA	84	96,246
Frederick VA	84	45,723
Huron MI	82	34,951
Edmonson KY	82	10,357
Jefferson WI	80	67,783
Effingham IL	81	31,704
Grant LA	75	17,526
Hamilton NY	75	5,279
Fond Du Lac WI	79	90,083
Caroline VA	84	19,217
Darlington SC	78	61,851
Camden NC	83	5,904
Dodge WI	78	76,559
Greenbrier WV	83	34,693
Columbia WI	81	45,088
Bell KY	76	31,506

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Table C-4. Metropolitan areas and rural counties with 1995-1997 measured design values within 15% of the 8-hour standard.

Name	Design Value (ppb)	Pop'n.
Barnwell SC	81	20,293
Hancock ME	83	46,948
Coos NH	77	34,828
Cheshire NH	74	70,121
Bennington VT	79	35,845
Adams MS	77	35,356
Albany-Schenectady-Troy, NY MSA	81	861,623
Appleton-Oshkosh-Neenah, WI MSA	81	315,121
Asheville, NC MSA	75	191,772
Austin-San Marcos, TX MSA	81	846,227
Bangor, ME MSA	73	91,629
Champaign-Urbana, IL MSA	81	173,025
Charleston-North Charleston, SC MSA	76	506,877
Charleston, WV MSA	81	250,454
Clarksville-Hopkinsville, TN-KY MSA	80	169,439
Columbia, SC MSA	83	453,932
Columbus, GA-AL MSA	83	260,862
Corpus Christi, TX MSA	83	349,894
Davenport-Moline-Rock Island, IA-IL MSA	78	350,855
Decatur, AL MSA	81	131,556
Decatur, IL MSA	83	117,206
Elmira, NY MSA	73	95,195
Green Bay, WI MSA	82	194,594
Hickory-Morganton-Lenoir, NC MSA	79	292,405
Huntsville, AL MSA	84	293,047
Jackson, MS MSA	77	395,396
Jacksonville, FL MSA	81	906,727
Lafayette, LA MSA	84	345,053
Lakeland-Winter Haven, FL MSA	74	405,382
Lansing-East Lansing, MI MSA	83	432,684
Little Rock-North Little Rock, AR MSA	81	513,026
Madison, WI MSA	79	367,085
Minneapolis-St. Paul, MN-WI MSA	81	2,538,776
Mobile, AL MSA	79	476,923
Monroe, LA MSA	77	142,191
Montgomery, AL MSA	77	292,517
New Orleans, LA MSA	84	1,285,262
Oklahoma City, OK MSA	83	958,839
Orlando, FL MSA	78	1,224,844

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Table C-4. Metropolitan areas and rural counties with 1995-1997 measured design values within 15% of the 8-hour standard.

Name	Design Value (ppb)	Pop'n.
Pensacola, FL MSA	84	344,406
Peoria-Pekin, IL MSA	80	339,172
Pittsfield, MA MSA	77	88,695
Roanoke, VA MSA	78	224,592
Rochester, NY MSA	83	1,062,470
Rockford, IL MSA	79	329,676
Rocky Mount, NC MSA	84	133,369
Sarasota-Bradenton, FL MSA	76	489,483
Savannah, GA MSA	72	257,899
Shreveport-Bossier City, LA MSA	82	376,330
Springfield, IL MSA	76	189,550
Springfield, MO MSA	78	264,346
Syracuse, NY MSA	79	742,237
Tampa-St. Petersburg-Clearwater, FL MSA	82	2,067,959
Utica-Rome, NY MSA	72	316,645
Victoria, TX MSA	78	74,361
Wichita, KS MSA	74	485,270
Williamsport, PA MSA	73	118,710
Wilmington, NC MSA	79	171,269
	sum	26,226,237
	MA count	52
	MA sum	24,306,857
	Cnty count	44
	Cnty sum	1,919,380

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Table C-5. Metropolitan areas and rural counties with design values projected to exceed the 1-hour standard in 2007 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Iberville LA	132	31,049
La Porte IN	131	107,066
Beaumont-Port Arthur, TX MSA	129	361,218
Hartford, CT MSA	125	1,157,585
Houston-Galveston-Brazoria, TX CMSA	175	3,731,029
Longview-Marshall, TX MSA	129	193,801
Memphis, TN-AR-MS MSA	125	1,007,306
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	136	19,549,649
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	126	5,893,019
Washington-Baltimore, DC-MD-VA-WV CMSA	126	6,726,395
	sum	38,758,117
	MA count	8
	MA sum	38,620,002
	Cnty count	2
	Cnty sum	138,115

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Table C-6. Metropolitan areas and rural counties with design values projected to exceed the 8-hour standard in 2007 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Manitowoc WI	85	80,421
Mason MI	88	25,537
Iberville LA	91	31,049
La Porte IN	93	107,066
Atlanta, GA MSA	95	2,959,500
Barnstable-Yarmouth, MA MSA	89	134,954
Baton Rouge, LA MSA	88	528,261
Beaumont-Port Arthur, TX MSA	86	361,218
Benton Harbor, MI MSA	86	161,378
Biloxi-Gulfport-Pascagoula, MS MSA	88	312,368
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	86	5,455,403
Charlotte-Gastonia-Rock Hill, NC-SC MSA	94	1,162,140
Chicago-Gary-Kenosha, IL-IN-WI CMSA	90	8,239,820
Cincinnati-Hamilton, OH-KY-IN CMSA	87	1,817,569
Cleveland-Akron, OH CMSA	86	2,859,644
Dallas-Fort Worth, TX CMSA	94	4,037,282
Grand Rapids-Muskegon-Holland, MI MSA	89	937,891
Hartford, CT MSA	88	1,157,585
Houston-Galveston-Brazoria, TX CMSA	109	3,731,029
Kansas City, MO-KS MSA	90	1,582,874
Knoxville, TN MSA	85	585,960
Memphis, TN-AR-MS MSA	90	1,007,306
Milwaukee-Racine, WI CMSA	94	1,607,183
Nashville, TN MSA	88	985,026
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	97	19,549,649
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	94	5,893,019
Pittsburgh, PA MSA	95	2,394,811
St. Louis, MO-JL MSA	90	2,492,348
San Antonio, TX MSA	85	1,324,749
Springfield, MA MSA	87	587,884
Tulsa, OK MSA	87	708,954
Washington-Baltimore, DC-MD-VA-WV CMSA	93	6,726,395
	sum	79,546,273
	MA count	28
	MA sum	79,302,200
	Cnty count	4
	Cnty sum	244,073

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Table C-7. Metropolitan areas and rural counties with design values projected to be less than the 8-hour standard but within 15% or it in 2007 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Kewaunee WI	84	18878
Door WI	83	25690
Jefferson TN	80	33016
Chester SC	78	32170
Logan OH	73	42310
Knox OH	77	47473
Clinton OH	80	35415
Haywood NC	75	46942
Granville NC	83	38345
Caswell NC	74	20693
Jefferson NY	79	110943
Essex NY	78	37152
Ste. Genevieve MO	77	16037
Cass MI	83	49477
Benzie MI	79	12200
Kent MD	82	17842
Sagadahoc ME	82	33535
Knox ME	76	36310
Livingston KY	72	9062
Sussex DE	81	113229
Clay AL	72	13252
Simpson KY	72	15145
Rockingham NC	73	86064
Monroe MO	78	9104
Walworth WI	77	75000
Sharkey MS	74	7066
Ulster NY	72	165304
St Mary LA	76	58086
Union SC	73	30337
Pointe Coupee LA	77	22540
Lawrence PA	74	96246
Huron MI	73	34951
Jefferson WI	73	67783
Fond Du Lac WI	73	90083
Camden NC	74	5904
Dodge WI	72	76559
Columbia WI	76	45088
Hancock ME	72	46948

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Table C-7. Metropolitan areas and rural counties with design values projected to be less than the 8-hour standard but within 15% or it in 2007 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Adams MS	74	35356
Albany-Schenectady-Troy, NY MSA	72	861623
Allentown-Bethlehem-Easton, PA MSA	80	595081
Altoona, PA MSA	75	130542
Appleton-Oshkosh-Neenah, WI MSA	76	315121
Augusta-Aiken, GA-SC MSA	77	415220
Austin-San Marcos, TX MSA	77	846227
Birmingham, AL MSA	83	839942
Buffalo-Niagara Falls, NY MSA	77	1189340
Canton-Massillon, OH MSA	76	394106
Chattanooga, TN-GA MSA	82	424347
Columbia, SC MSA	74	453932
Columbus, GA-AL MSA	75	260862
Columbus, OH MSA	78	1345450
Corpus Christi, TX MSA	81	349894
Davenport-Moline-Rock Island, IA-IL MSA	74	350855
Dayton-Springfield, OH MSA	79	951270
Detroit-Ann Arbor-Flint, MI CMSA	84	5187171
Dover, DE MSA	79	110993
Elkhart-Goshen, IN MSA	79	156198
Erie, PA MSA	75	275572
Evansville-Henderson, IN-KY MSA	80	278990
Fayetteville, NC MSA	79	274713
Fort Wayne, IN MSA	81	456281
Green Bay, WI MSA	75	194594
Greensboro--Winston-Salem--High Point, NC MSA	80	1050304
Greenville, NC MSA	77	108480
Greenville-Spartanburg-Anderson, SC MSA	79	830539
Harrisburg-Lebanon-Carlisle, PA MSA	75	587986
Houma, LA MSA	81	182842
Huntsville, AL MSA	73	293047
Indianapolis, IN MSA	84	1380491
Jacksonville, FL MSA	79	906727
Jamestown, NY MSA	74	141895
Janesville-Beloit, WI MSA	78	139510
Johnson City-Kingsport-Bristol, TN-VA MSA	77	436047
Johnstown, PA MSA	74	241280
Kalamazoo-Battle Creek, MI MSA	75	429453

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Table C-7. Metropolitan areas and rural counties with design values projected to be less than the 8-hour standard but within 15% or it in 2007 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Lafayette, LA MSA	79	345053
Lake Charles, LA MSA	77	168134
Lakeland-Winter Haven, FL MSA	72	405382
Lancaster, PA MSA	83	422822
Lansing-East Lansing, MI MSA	74	432684
Lexington, KY MSA	75	405936
Lima, OH MSA	75	154340
Little Rock-North Little Rock, AR MSA	79	513026
Longview-Marshall, TX MSA	84	193801
Louisville, KY-IN MSA	77	949012
Madison, WI MSA	74	367085
Minneapolis-St. Paul, MN-WI MSA	79	2538776
Mobile, AL MSA	75	476923
Monroe, LA MSA	73	142191
New Orleans, LA MSA	80	1285262
Norfolk-Virginia Beach-Newport News, VA-NC MSA	78	1444710
Oklahoma City, OK MSA	83	958839
Orlando, FL MSA	78	1224844
Owensboro, KY MSA	73	87189
Pensacola, FL MSA	82	344406
Portland, ME MSA	83	221095
Providence-Fall River-Warwick, RI-MA MSA	82	1134350
Raleigh-Durham-Chapel Hill, NC MSA	82	858485
Reading, PA MSA	78	336523
Richmond-Petersburg, VA MSA	77	865640
Rochester, NY MSA	75	1062470
Rocky Mount, NC MSA	76	133369
Sarasota-Bradenton, FL MSA	76	489483
Scranton--Wilkes-Barre--Hazleton, PA MSA	75	638524
Sharon, PA MSA	81	121003
Sheboygan, WI MSA	83	103877
Shreveport-Bossier City, LA MSA	77	376330
South Bend, IN MSA	80	247052
Steubenville-Weirton, OH-WV MSA	73	142523
Tampa-St. Petersburg-Clearwater, FL MSA	83	2067959
Terre Haute, IN MSA	72	147585
Toledo, OH MSA	80	614128
Tyler, TX MSA	82	151309

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Table C-7. Metropolitan areas and rural counties with design values projected to be less than the 8-hour standard but within 15% or it in 2007 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Victoria, TX MSA	75	74361
Wichita, KS MSA	72	485270
Wilmington, NC MSA	72	171269
York, PA MSA	74	339574
Youngstown-Warren, OH MSA	81	600895
	sum	49,387,949
	MA count	80
	MA sum	47,630,414
	Cnty count	39
	Cnty sum	1,757,535

Appendix C: One-hour and Eight-hour County Design Values

Table C-8. Metropolitan areas and rural counties with design values projected to exceed the 8-hour standard in 2007 with ROTR and Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Mason MI	87	25,537
Iberville LA	90	31,049
La Porte IN	92	107,066
Atlanta, GA MSA	91	2,959,500
Barnstable-Yarmouth, MA MSA	87	134,954
Baton Rouge, LA MSA	86	528,261
Beaumont-Port Arthur, TX MSA	85	361,218
Benton Harbor, MI MSA	85	161,378
Biloxi-Gulfport-Pascagoula, MS MSA	87	312,368
Charlotte-Gastonia-Rock Hill, NC-SC MSA	90	1,162,140
Chicago-Gary-Kenosha, IL-IN-WI CMSA	90	8,239,820
Cincinnati-Hamilton, OH-KY-IN CMSA	88	1,817,569
Cleveland-Akron, OH CMSA	85	2,859,644
Dallas-Fort Worth, TX CMSA	92	4,037,282
Grand Rapids-Muskegon-Holland, MI MSA	87	937,891
Hartford, CT MSA	86	1,157,585
Houston-Galveston-Brazoria, TX CMSA	109	3,731,029
Kansas City, MO-KS MSA	88	1,582,874
Memphis, TN-AR-MS MSA	88	1,007,306
Milwaukee-Racine, WI CMSA	93	1,607,183
Nashville, TN MSA	86	985,026
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	97	19,549,649
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	94	5,893,019
Pittsburgh, PA MSA	94	2,394,811
St. Louis, MO-IL MSA	87	2,492,348
Springfield, MA MSA	85	587,884
Tulsa, OK MSA	86	708,954
Washington-Baltimore, DC-MD-VA-WV CMSA	91	6,726,395
	sum	72,099,740
	MA count	25
	MA sum	71,936,088
	Cnty count	3
	Cnty sum	163,652

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Table C-9. Metropolitan areas and rural counties with design values projected to exceed the 8-hour standard in 2010 with ROTR controls but without Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Mason MI	87	25,537
Iberville LA	90	31,049
La Porte IN	92	107,066
Atlanta, GA MSA	94	2,959,500
Barnstable-Yarmouth, MA MSA	88	134,954
Baton Rouge, LA MSA	87	528,261
Beaumont-Port Arthur, TX MSA	85	361,218
Benton Harbor, MI MSA	85	161,378
Biloxi-Gulfport-Pascagoula, MS MSA	87	312,368
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	85	5,455,403
Charlotte-Gastonia-Rock Hill, NC-SC MSA	93	1,162,140
Chicago-Gary-Kenosha, IL-IN-WI CMSA	90	8,239,820
Cincinnati-Hamilton, OH-KY-IN CMSA	87	1,817,569
Cleveland-Akron, OH CMSA	85	2,859,644
Dallas-Fort Worth, TX CMSA	93	4,037,282
Grand Rapids-Muskegon-Holland, MI MSA	88	937,891
Hartford, CT MSA	87	1,157,585
Houston-Galveston-Brazoria, TX CMSA	109	3,731,029
Kansas City, MO-KS MSA	89	1,582,874
Memphis, TN-AR-MS MSA	89	1,007,306
Milwaukee-Racine, WI CMSA	93	1,607,183
Nashville, TN MSA	87	985,026
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	97	19,549,649
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	94	5,893,019
Pittsburgh, PA MSA	94	2,394,811
St. Louis, MO-IL MSA	89	2,492,348
Springfield, MA MSA	86	587,884
Tulsa, OK MSA	86	708,954
Washington-Baltimore, DC-MD-VA-WV CMSA	92	6,726,395
	sum	77,555,143
	MA count	26
	MA sum	77,391,491
	Cnty count	3
	Cnty sum	163,652

Appendix C: One-hour and Eight-hour County Design Values

Table C-10. Metropolitan areas and rural counties with design values projected to exceed the 8-hour standard in 2010 with ROTR controls and Tier 2/Sulfur controls.

Name	Design Value (ppb)	Pop'n.
Mason MI	86	25,537
Iberville LA	89	31,049
La Porte IN	91	107,066
Atlanta, GA MSA	89	2,959,500
Barnstable-Yarmouth, MA MSA	85	134,954
Biloxi-Gulfport-Pascagoula, MS MSA	86	312,368
Charlotte-Gastonia-Rock Hill, NC-SC MSA	87	1,162,140
Chicago-Gary-Kenosha, IL-IN-WI CMSA	91	8,239,820
Cincinnati-Hamilton, OH-KY-IN CMSA	88	1,817,569
Dallas-Fort Worth, TX CMSA	90	4,037,282
Grand Rapids-Muskegon-Holland, MI MSA	86	937,891
Houston-Galveston-Brazoria, TX CMSA	110	3,731,029
Kansas City, MO-KS MSA	86	1,582,874
Memphis, TN-AR-MS MSA	86	1,007,306
Milwaukee-Racine, WI CMSA	92	1,607,183
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	98	19,549,649
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	93	5,893,019
Pittsburgh, PA MSA	93	2,394,811
St. Louis, MO-IL MSA	85	2,492,348
Tulsa, OK MSA	85	708,954
Washington-Baltimore, DC-MD-VA-WV CMSA	90	6,726,395
	sum	65,458,744
	MA count	18
	MA sum	65,295,092
	Cnty count	3
	Cnty sum	163,652

Table C-11. One-hour county design values (ppb) and population

All 1-hour county design values are listed in this table. The design value headings in the table are defined as follows:

dv1—measured 1-hour design value 1995-1997.

bg1—projected design value in 2007 after ROTR.

nt110—interpolated design value in 2010 without Tier 2/Sulfur controls.

t107—projected design values in 2007 after ROTR and Tier 2/Sulfur (OMS4).

t110—interpolated design values in 2010 after ROTR and Tier 2/Sulfur.

t120—projected design values in 2020 after ROTR and Tier 2/Sulfur (OMS3).

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u107—interpolated design values in 2007 after ROTR and Tier 2/Sulfur.

u110—interpolated design values in 2010 after ROTR and Tier 2/Sulfur.

u120—interpolated design values in 2020 after ROTR and Tier 2/Sulfur.

The “u” values correspond to today’s proposal. The “t” values correspond to OMS3 and OMS4. For discussing the effects of today’s proposal on design values, we projected design values using the rollback method for three modeling runs: 2007 post ROTR, OMS3, and OMS4. All other design values have been linearly interpolated based on NO_X. See the main text for further details.

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
AL	Clay	110	90	89	87	85	82	87	85	82	75,000
AL	Colbert	83	69	68	67	66	64	67	66	64	25,617
AL	Elmore	102	86	85	83	81	78	83	81	78	46,975
AL	Geneva	84	77	76	75	73	71	75	73	71	34,773
AL	Jefferson	132	117	116	114	112	108	114	112	108	31,679
AL	Lawrence	98	86	85	83	81	79	83	81	79	80,421
AL	Madison	102	87	86	84	82	79	84	82	79	18,878
AL	Mobile	111	105	104	103	101	98	103	101	98	67,783
AL	Montgomery	92	84	83	81	79	75	81	79	75	90,083
AL	Morgan	114	101	100	98	96	93	98	96	93	4,590
AL	Shelby	127	111	109	106	103	98	106	103	98	25,690
AL	Sumter	83	76	75	73	72	70	73	72	70	76,559
AR	Crittenden	122	111	110	108	106	103	108	106	103	45,088
AR	Montgomery	79	74	73	72	71	69	72	71	69	34,693
AR	Newton	83	78	77	76	74	72	76	74	72	25,466
AR	Pulaski	108	106	105	102	100	97	102	100	97	11,949
CT	Fairfield	138	124	123	123	122	121	123	122	121	56,942
CT	Hartford	138	122	121	121	119	117	121	119	117	45,723
CT	Litchfield	120	104	103	102	100	97	102	100	97	19,217
CT	Middlesex	135	116	115	113	111	109	113	111	109	35,845
CT	New Haven	157	136	135	133	131	129	133	131	129	51,373
CT	New London	144	125	124	122	120	117	122	120	117	35,303
CT	Tolland	127	111	110	108	106	104	108	106	104	33,016
DC	District of Columbia	125	107	106	106	106	106	106	106	106	15,795
DE	Kent	124	104	103	101	99	95	101	99	95	19,437
DE	New Castle	139	116	115	113	111	107	113	111	107	50,480
DE	Sussex	123	107	106	104	102	98	104	102	98	25,741

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
FL	Alachua	101	97	96	93	91	86	93	91	86	34,854
FL	Brevard	86	84	83	82	80	77	82	80	77	40,339
FL	Broward	103	103	103	103	103	103	103	103	103	73,712
FL	Duval	116	114	113	110	108	103	110	108	103	36,815
FL	Escambia	113	111	110	109	107	105	109	107	105	30,337
FL	Hillsborough	112	113	112	111	109	106	111	109	106	57,494
FL	Lee	88	87	86	85	84	82	85	84	82	61,851
FL	Leon	96	90	89	86	83	78	86	83	78	32,170
FL	Manatee	96	97	96	95	93	90	95	93	90	20,293
FL	Orange	106	107	106	103	100	94	103	100	94	23,862
FL	Osceola	96	95	94	92	90	86	92	90	86	96,246
FL	Palm Beach	89	83	82	80	78	75	80	78	75	121,082
FL	Pasco	92	89	88	86	84	81	86	84	81	36,490
FL	Pinellas	93	91	90	89	87	84	89	87	84	10,333
FL	Polk	99	96	95	93	91	88	93	91	88	31,969
FL	Sarasota	99	99	98	96	94	92	96	94	92	40,113
FL	Seminole	95	92	91	89	87	82	89	87	82	42,310
FL	St Johns	91	88	87	85	83	79	85	83	79	47,473
FL	St Lucie	82	80	79	78	76	73	78	76	73	35,415
FL	Volusia	89	87	86	83	81	77	83	81	77	15,419
GA	Bibb	122	107	105	102	99	92	102	99	92	11,268
GA	Chatham	85	78	77	76	74	72	76	74	72	86,064
GA	DeKalb	136	117	115	111	107	100	111	108	100	30,180
GA	Douglas	140	122	120	116	112	105	116	113	105	20,798
GA	Fannin	92	81	80	78	76	72	78	76	72	25,078
GA	Fulton	143	124	122	119	116	109	119	116	109	46,942
GA	Glynn	89	84	83	82	80	78	82	80	78	38,345
GA	Gwinnett	121	103	101	97	94	87	97	94	87	39,995
GA	Muscogee	108	98	96	93	90	84	93	90	84	20,693
GA	Paulding	112	97	95	92	89	83	92	89	83	5,904
GA	Richmond	118	105	104	101	98	93	101	98	93	165,304
GA	Rockdale	145	123	121	117	114	107	117	114	107	110,943
GA	Spalding	126	109	107	103	100	93	103	100	93	5,279
IA	Harrison	79	77	76	76	75	74	76	75	74	37,152
IA	Linn	75	71	70	70	69	68	70	69	68	38,592
IA	Palo Alto	70	68	67	67	66	65	67	66	65	74,929

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
IA	Polk	86	82	81	80	79	77	80	79	77	34,828
IA	Scott	95	90	89	88	87	86	88	87	86	70,121
IA	Story	87	83	82	81	80	78	81	80	78	35,410
IA	Van Buren	82	76	75	74	73	71	74	73	71	49,216
IA	Warren	74	70	69	69	68	66	69	68	66	16,037
IL	Adams	89	80	79	78	77	75	78	77	75	9,104
IL	Champaign	94	77	76	75	74	72	75	74	72	47,880
IL	Cook	127	124	124	125	125	127	124	125	126	7,066
IL	Du Page	103	95	94	94	93	92	94	93	92	65,581
IL	Effingham	97	79	78	77	76	74	77	76	74	75,555
IL	Hamilton	89	70	69	69	68	66	69	68	66	8,377
IL	Jersey	112	98	97	94	92	87	94	92	87	9,071
IL	Kane	116	102	101	101	99	97	101	99	97	35,356
IL	Lake	116	108	107	107	106	104	107	106	104	10,415
IL	Macon	100	83	82	80	78	76	80	78	76	19,776
IL	Macoupin	102	85	84	82	80	77	82	80	77	37,308
IL	Madison	128	108	107	105	103	98	105	103	98	25,537
IL	McHenry	108	97	96	96	94	92	96	94	92	34,951
IL	Peoria	95	82	81	80	79	77	80	79	77	49,477
IL	Randolph	94	82	81	80	79	77	80	79	77	12,200
IL	Rock Island	83	76	75	75	74	73	75	74	73	17,842
IL	Sangamon	98	83	82	80	78	76	80	78	76	35,308
IL	St Clair	108	97	96	95	93	90	95	93	90	49,767
IL	Will	108	92	91	90	89	87	90	89	87	33,535
IL	Winnebago	93	83	82	82	81	80	82	81	80	18,653
IN	Allen	106	95	94	93	92	90	93	92	90	52,602
IN	Clark	125	104	103	102	101	99	102	101	99	36,310
IN	De Kalb	82	73	72	71	70	69	71	70	69	115,904
IN	Elkhart	113	100	99	98	97	95	98	97	95	46,948
IN	Floyd	125	111	111	111	110	110	111	110	110	58,086
IN	Hamilton	116	102	101	100	99	98	100	99	98	22,540
IN	Hancock	120	105	104	104	103	102	104	103	102	31,049
IN	Johnson	102	84	83	83	82	80	83	82	80	17,526
IN	Kosciusko	100	87	86	85	84	82	85	84	82	30,083
IN	La Porte	146	131	130	129	127	125	129	127	125	10,361
IN	Lake	117	105	104	104	102	100	104	102	100	15,145

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
IN	Lawrence	100	75	74	73	72	71	73	72	71	49,489
IN	Madison	112	98	97	96	94	92	96	94	92	72,583
IN	Marion	115	99	98	98	97	95	98	97	95	30,283
IN	Morgan	103	83	82	82	81	79	82	81	79	9,628
IN	Porter	124	109	108	107	105	103	107	105	103	62,879
IN	Posey	99	83	82	81	80	79	81	80	79	9,062
IN	St Joseph	114	100	99	98	97	96	98	97	96	13,998
IN	Tippecanoe	104	85	84	84	83	81	84	83	81	89,240
IN	Vanderburgh	114	97	96	95	94	92	95	94	92	7,864
IN	Vigo	107	88	87	86	85	83	86	85	83	33,550
IN	Warrick	115	92	91	91	89	87	91	89	87	10,357
KS	Miami	114	112	111	110	109	107	110	109	107	31,506
KS	Pawnee	80	80	80	80	80	80	80	80	80	7,555
KS	Sedgwick	96	93	92	92	91	89	92	91	89	7,676
KS	Wyandotte	113	110	109	109	108	107	109	108	107	74,252
KY	Bell	92	74	73	72	70	68	72	70	68	10,669
KY	Boone	108	90	89	89	88	86	89	88	86	14,730
KY	Boyd	122	98	97	96	94	92	96	94	92	42,836
KY	Bullitt	116	94	93	92	90	88	92	90	88	107,066
KY	Campbell	115	99	98	97	95	93	97	95	93	65,294
KY	Christian	101	80	79	78	77	75	78	77	75	34,583
KY	Daviess	108	89	88	88	87	85	88	87	85	47,679
KY	Edmonson	118	96	95	94	92	90	94	92	90	8,499
KY	Fayette	101	90	89	89	88	87	89	88	87	31,704
KY	Graves	92	73	72	72	71	69	72	71	69	66,090
KY	Greenup	114	90	89	89	87	85	89	87	85	62,496
KY	Hancock	114	82	81	80	79	77	80	79	77	15,992
KY	Hardin	113	86	85	84	82	80	84	82	80	113,229
KY	Henderson	108	85	84	84	83	81	84	83	81	7,666
KY	Jefferson	120	100	100	100	99	99	100	99	99	7,841
KY	Jessamine	98	81	80	79	78	76	79	78	76	16,174
KY	Kenton	114	97	96	95	94	92	95	94	92	23,647
KY	Lawrence	95	72	71	70	69	67	70	69	67	13,252
KY	Livingston	108	91	90	89	88	86	89	88	86	292,594
KY	McCracken	100	81	80	79	78	76	79	78	76	181,276
KY	McLean	103	83	82	82	81	79	82	81	79	149,285

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
KY	Oldham	112	97	96	95	94	92	95	94	92	247,105
KY	Perry	90	77	76	74	73	71	74	73	71	291,130
KY	Pike	98	83	82	80	78	76	80	78	76	130,542
KY	Pulaski	94	76	75	74	73	71	74	73	71	140,510
KY	Scott	101	89	88	86	84	82	86	84	82	140,320
KY	Simpson	101	87	86	84	82	80	84	82	80	174,821
KY	Trigg	101	85	84	83	81	79	83	81	79	54,091
LA	Ascension	121	113	112	111	109	107	111	109	107	648,951
LA	Beauregard	117	106	105	105	104	103	105	104	103	71,120
LA	Bossier	98	92	91	90	89	87	90	89	87	545,837
LA	Caddo	101	95	94	93	91	89	93	91	89	54,457
LA	Calcasieu	116	104	103	103	102	100	103	102	100	352,910
LA	East Baton Rouge	131	122	121	118	116	112	118	116	112	41,611
LA	Grant	91	84	83	83	82	80	83	82	80	189,719
LA	Iberville	139	132	131	130	129	127	130	129	127	120,940
LA	Jefferson	107	103	102	102	101	100	102	101	100	18,375
LA	Lafayette	109	102	101	100	99	97	100	99	97	576,407
LA	Lafourche	127	122	121	120	119	118	120	119	118	146,601
LA	Livingston	127	118	117	115	113	110	115	113	110	186,605
LA	Orleans	96	89	88	88	87	85	88	87	85	380,105
LA	Ouachita	95	90	89	88	87	86	88	87	86	70,526
LA	Pointe Coupee	111	103	102	101	99	97	101	99	97	58,214
LA	St Bernard	98	91	90	90	89	88	90	89	88	19,419
LA	St Charles	115	110	109	108	107	107	108	107	107	239,397
LA	St James	119	112	111	110	109	107	110	109	107	80,509
LA	St John The Baptist	114	107	106	106	105	103	106	105	103	161,378
LA	St Mary	104	98	97	97	96	94	97	96	94	115,243
LA	West Baton Rouge	114	106	105	103	101	97	103	101	97	31,760
MA	Barnstable	131	118	117	115	113	110	115	113	110	651,525
MA	Berkshire	99	85	84	83	81	79	83	81	79	99,358
MA	Bristol	138	119	118	116	114	110	116	114	110	506,325
MA	Essex	113	100	99	98	96	93	98	96	93	245,845
MA	Hampden	126	115	114	114	112	110	114	112	110	164,587
MA	Hampshire	132	118	117	115	113	110	115	113	110	456,310
MA	Middlesex	109	95	94	93	91	89	93	91	89	670,080
MA	Plymouth	102	89	88	87	85	83	87	85	83	336,073

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
MA	Suffolk	95	86	86	86	85	84	86	85	84	1,398,468
MA	Worcester	108	93	92	90	88	85	90	88	85	709,705
MD	Anne Arundel	142	123	122	120	118	114	120	118	114	435,276
MD	Baltimore	130	112	111	109	107	103	109	107	103	104,233
MD	Baltimore City	137	122	121	120	118	116	120	118	116	120,005
MD	Calvert	105	85	84	82	80	78	82	80	78	663,906
MD	Carroll	115	94	93	91	89	87	91	89	87	260,120
MD	Cecil	152	126	125	123	121	116	123	121	116	220,756
MD	Charles	118	98	97	95	93	91	95	93	91	968,532
MD	Harford	145	126	125	122	120	116	122	120	116	131,761
MD	Kent	129	110	109	107	105	102	107	105	102	367,585
MD	Montgomery	118	98	97	96	94	91	96	94	91	168,767
MD	Prince George's	132	113	112	110	108	105	110	108	105	173,025
ME	Cumberland	121	107	106	105	103	100	105	103	100	295,039
ME	Hancock	115	100	99	97	95	91	97	95	91	128,776
ME	Kennebec	98	87	86	85	83	80	85	83	80	207,619
ME	Knox	119	104	103	101	99	96	101	99	96	511,433
ME	Oxford	79	71	70	69	67	64	69	67	64	110,605
ME	Penobscot	95	84	83	82	80	78	82	80	78	131,497
ME	Piscataquis	80	72	71	70	68	65	70	68	65	50,319
ME	Sagadahoc	125	109	108	107	105	101	107	105	101	285,536
ME	Somerset	92	83	82	80	78	75	80	78	75	128,181
ME	Washington	107	93	92	90	88	85	90	88	85	5,105,067
ME	York	126	113	112	110	108	106	110	108	106	128,932
MI	Allegan	137	120	119	118	117	115	118	117	115	475,594
MI	Benzie	108	97	96	95	93	91	95	93	91	317,471
MI	Berrien	119	103	102	101	100	98	101	100	98	516,418
MI	Cass	115	102	101	100	98	96	100	98	96	183,241
MI	Clinton	88	77	76	75	74	73	75	74	73	357,313
MI	Genesee	99	89	88	88	87	86	88	87	86	781,666
MI	Huron	110	98	97	96	95	93	96	95	93	291,479
MI	Ingham	97	87	86	85	84	83	85	84	83	113,909
MI	Kalamazoo	106	92	91	90	88	86	90	88	86	866,228
MI	Kent	124	111	110	109	107	105	109	107	105	150,187
MI	Lenawee	104	94	93	93	91	89	93	91	89	83,866
MI	Macomb	124	111	111	111	111	111	111	111	111	142,031

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
MI	Mason	125	113	112	112	110	108	112	110	108	57,589
MI	Mecosta	124	108	107	105	103	101	105	103	101	68,941
MI	Muskegon	136	121	120	120	118	116	120	118	116	215,499
MI	Oakland	117	105	104	104	103	103	104	103	103	142,585
MI	Ottawa	113	101	100	100	99	98	100	99	98	514,990
MI	Roscommon	99	87	86	86	85	83	86	85	83	81,129
MI	St Clair	119	108	107	106	104	102	106	104	102	122,354
MI	Washtenaw	104	94	93	92	90	88	92	90	88	1,412,140
MI	Wayne	114	104	103	103	102	101	103	102	101	99,821
MN	Anoka	106	103	103	103	102	101	103	102	101	271,126
MN	Dakota	91	88	88	88	87	87	88	87	87	285,720
MN	Lake	74	74	74	74	74	74	74	74	74	179,278
MN	St Louis	80	80	80	80	80	80	80	80	80	128,300
MN	Washington	103	100	99	99	98	96	99	98	96	37,068
MO	Clay	128	122	121	120	118	115	120	118	115	961,437
MO	Greene	101	90	89	87	85	81	87	85	81	66,929
MO	Jackson	88	85	84	83	82	80	83	82	80	291,145
MO	Jefferson	125	113	112	110	108	106	110	108	106	273,525
MO	Monroe	96	89	88	87	85	83	87	85	83	1,852,810
MO	Platte	116	112	111	110	109	107	110	109	107	1,170,103
MO	St Louis	119	106	105	103	100	95	103	100	95	264,036
MO	St Louis City	108	99	98	97	96	94	97	96	94	85,167
MO	St. Charles	131	117	116	113	111	107	113	111	107	150,979
MO	Ste Genevieve	108	96	95	94	92	90	94	92	90	148,723
MS	Adams	97	94	93	92	91	89	92	91	89	147,548
MS	Choctaw	81	73	72	71	70	68	71	70	68	573,809
MS	DeSoto	131	125	124	124	123	121	124	123	121	136,731
MS	Franklin	94	91	90	89	88	86	89	88	86	93,182
MS	Hancock	105	100	99	98	97	95	98	97	95	370,712
MS	Hinds	97	89	88	87	85	83	87	85	83	100,043
MS	Jackson	109	113	112	111	110	109	111	110	109	31,513
MS	Lauderdale	92	83	82	81	79	76	81	79	76	117,206
MS	Lee	96	88	87	85	83	81	85	83	81	327,140
MS	Madison	89	82	81	80	79	78	80	79	78	36,033
MS	Sharkey	95	89	88	88	87	85	88	87	85	717,400
MS	Warren	97	91	90	90	89	87	90	89	87	145,607

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
NC	Alexander	94	85	84	81	79	74	81	79	74	1,083,592
NC	Buncombe	86	78	77	75	73	69	75	73	69	2,111,687
NC	Caldwell	97	87	86	83	81	76	83	81	76	91,476
NC	Camden	93	82	81	80	78	75	80	78	75	282,937
NC	Caswell	111	93	92	90	88	83	90	88	83	430,459
NC	Chatham	103	84	83	80	78	74	80	78	74	110,993
NC	Cumberland	106	96	95	92	89	84	92	89	84	198,213
NC	Davie	105	92	91	88	86	81	88	86	81	156,198
NC	Duplin	89	80	79	77	75	72	77	75	72	95,195
NC	Durham	103	91	89	86	83	78	86	83	78	275,572
NC	Edgecombe	102	91	90	87	85	80	87	85	80	44,920
NC	Forsyth	115	105	104	101	98	93	101	98	93	165,058
NC	Franklin	110	93	91	88	85	80	88	85	80	43,044
NC	Granville	116	102	100	97	94	87	97	94	87	25,968
NC	Guilford	109	98	96	93	90	85	93	90	85	102,874
NC	Haywood	107	96	95	92	90	85	92	90	85	274,566
NC	Johnston	107	91	90	87	85	80	87	85	80	51,666
NC	Lincoln	105	93	92	89	87	82	89	87	82	335,113
NC	Martin	90	78	77	75	73	70	75	73	70	150,171
NC	Mecklenburg	123	121	119	116	113	106	116	113	106	300,836
NC	New Hanover	102	93	92	91	89	85	91	89	85	35,324
NC	Northampton	100	83	82	80	78	74	80	78	74	181,596
NC	Person	100	82	81	79	77	73	79	77	73	90,509
NC	Pitt	104	90	89	87	85	80	87	85	80	158,983
NC	Rockingham	113	100	99	96	93	88	96	93	88	500,631
NC	Rowan	122	107	106	103	100	94	103	100	94	187,768
NC	Swain	78	66	65	64	62	60	64	62	60	194,594
NC	Wake	118	110	108	105	101	94	105	102	94	265,878
NC	Yancey	108	92	91	89	87	84	89	87	84	347,420
ND	Cass	75	75	75	75	75	75	75	75	75	27,859
NE	Douglas	88	86	85	85	84	82	85	84	82	107,924
NE	Lancaster	69	67	66	66	65	65	66	65	65	226,800
NH	Belknap	89	80	79	79	77	75	79	77	75	145,196
NH	Carroll	88	79	78	76	75	73	76	75	73	93,894
NH	Cheshire	91	80	79	78	76	73	78	76	73	44,506
NH	Coos	101	91	90	88	86	83	88	86	83	237,813

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
NH	Grafton	77	69	68	67	66	64	67	66	64	41,172
NH	Hillsborough	111	98	97	95	93	91	95	93	91	254,957
NH	Merrimack	98	88	87	87	86	84	87	86	84	851,783
NH	Rockingham	130	117	116	114	112	110	114	112	110	143,196
NH	Strafford	101	91	90	89	87	85	89	87	85	128,699
NH	Sullivan	90	81	80	79	77	75	79	77	75	174,092
NJ	Atlantic	124	106	105	103	101	98	103	101	98	70,709
NJ	Bergen	122	108	107	106	105	103	106	105	103	27,544
NJ	Camden	137	119	118	116	114	111	116	114	111	85,860
NJ	Cumberland	115	96	95	93	91	87	93	91	87	2,818,199
NJ	Essex	114	98	97	97	96	94	97	96	94	217,399
NJ	Gloucester	128	112	111	109	107	104	109	107	104	191,707
NJ	Hudson	120	113	112	112	111	111	112	111	111	51,150
NJ	Hunterdon	119	102	101	100	98	95	100	98	95	96,827
NJ	Mercer	131	113	112	110	108	106	110	108	106	36,742
NJ	Middlesex	139	121	120	119	117	114	119	117	114	61,834
NJ	Monmouth	138	121	120	118	116	113	118	116	113	238,912
NJ	Morris	124	105	104	103	101	98	103	101	98	45,527
NJ	Ocean	149	125	124	122	120	115	122	120	115	108,936
NJ	Union	109	94	93	92	91	89	92	91	89	797,159
NY	Albany	105	94	93	91	89	87	91	89	87	130,669
NY	Bronx	123	121	121	121	121	121	121	121	121	55,920
NY	Chautauqua	104	90	89	88	86	84	88	86	84	88,109
NY	Chemung	88	78	77	76	75	73	76	75	73	254,441
NY	Dutchess	113	97	96	94	92	89	94	92	89	53,794
NY	Erie	91	79	78	78	77	75	78	77	75	77,982
NY	Essex	101	91	90	88	86	84	88	86	84	672,971
NY	Hamilton	97	86	85	84	82	79	84	82	79	83,829
NY	Herkimer	88	78	77	76	74	72	76	74	72	141,895
NY	Jefferson	110	99	98	97	95	92	97	95	92	139,510
NY	Kings	124	110	109	108	106	104	108	106	104	143,596
NY	Madison	89	79	78	77	75	73	77	75	73	163,029
NY	Monroe	102	93	92	91	90	88	91	90	88	223,411
NY	New York	121	114	113	113	112	112	113	112	112	153,411
NY	Niagara	102	93	92	92	91	90	92	91	90	57,867
NY	Oneida	95	85	84	83	81	79	83	81	79	23,466

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
NY	Onondaga	102	90	89	89	87	85	89	87	85	161,993
NY	Orange	115	99	98	97	95	93	97	95	93	633,232
NY	Putnam	122	105	104	102	100	97	102	100	97	85,969
NY	Queens	125	119	119	120	120	121	119	120	120	335,749
NY	Richmond	137	121	120	119	117	114	119	117	114	31,255
NY	Saratoga	101	91	90	88	87	85	88	87	85	51,043
NY	Schenectady	94	84	83	82	80	78	82	80	78	68,250
NY	Suffolk	138	120	119	118	116	112	118	116	112	164,762
NY	Ulster	97	84	83	81	79	77	81	79	77	130,598
NY	Wayne	102	91	90	89	88	86	89	88	86	168,134
NY	Westchester	121	104	103	102	100	98	102	100	98	405,382
OH	Allen	106	89	88	88	87	85	88	87	85	422,822
OH	Ashtabula	105	89	88	87	86	84	87	86	84	281,912
OH	Butler	125	104	103	102	100	98	102	100	98	57,883
OH	Clark	118	99	98	97	96	94	97	96	94	133,239
OH	Clermont	116	99	98	98	97	95	98	97	95	111,486
OH	Clinton	121	100	99	98	96	94	98	96	94	225,366
OH	Cuyahoga	108	94	93	92	90	88	92	90	88	23,867
OH	Delaware	99	85	84	84	83	81	84	83	81	30,508
OH	Franklin	107	88	87	86	85	83	86	85	83	109,755
OH	Geauga	112	100	99	99	97	95	99	97	95	213,641
OH	Greene	111	93	92	91	90	88	91	90	88	349,660
OH	Hamilton	119	112	112	112	112	113	111	112	112	104,948
OH	Jefferson	111	93	92	91	89	87	91	89	87	87,777
OH	Knox	113	96	95	94	93	91	94	93	91	64,404
OH	Lake	119	103	102	101	99	97	101	99	97	664,937
OH	Lawrence	113	87	86	86	84	82	86	84	82	47,567
OH	Licking	115	97	96	95	93	91	95	93	91	33,263
OH	Logan	100	84	83	82	80	78	82	80	78	149,967
OH	Lorain	101	91	90	89	88	86	89	88	86	367,085
OH	Lucas	111	100	99	98	97	95	98	97	95	383,545
OH	Madison	112	93	92	91	89	87	91	89	87	398,978
OH	Mahoning	109	95	94	93	91	88	93	91	88	67,910
OH	Medina	110	97	96	95	93	91	95	93	91	826,330
OH	Miami	110	93	92	91	90	88	91	90	88	49,939
OH	Montgomery	112	94	93	93	92	90	93	92	90	1,255,488

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
OH	Portage	114	101	100	98	96	94	98	96	94	72,831
OH	Preble	110	88	87	86	85	83	86	85	83	959,275
OH	Stark	107	93	92	91	90	88	91	90	88	175,034
OH	Summit	113	99	98	97	95	93	97	95	93	304,715
OH	Trumbull	109	95	94	92	90	87	92	90	87	95,328
OH	Union	75	63	62	62	61	59	62	61	59	243,641
OH	Warren	124	104	103	102	100	97	102	100	97	145,896
OH	Washington	110	84	83	82	80	78	82	80	78	275,227
OH	Wood	94	82	81	80	79	78	80	79	78	50,251
OK	Cleveland	102	101	100	98	96	94	98	96	94	378,643
OK	Comanche	92	86	85	84	83	81	84	83	81	142,191
OK	Latimer	100	95	94	93	92	90	93	92	90	49,210
OK	Mc Clain	95	91	90	89	87	85	89	87	85	209,085
OK	Oklahoma	110	110	109	108	106	104	108	106	104	103,281
OK	Omulgee	94	92	91	90	89	87	90	89	87	35,061
OK	Tulsa	121	121	120	120	119	117	120	119	117	510,784
PA	Allegheny	133	121	120	120	118	116	120	118	116	81,021
PA	Beaver	105	93	92	91	90	89	91	90	89	67,675
PA	Berks	118	101	100	98	96	93	98	96	93	118,570
PA	Blair	114	95	94	92	90	88	92	90	88	20,879
PA	Bucks	137	115	114	112	110	106	112	110	106	42,437
PA	Cambria	102	86	85	84	82	80	84	82	80	39,996
PA	Dauphin	113	97	96	93	91	86	93	91	86	448,306
PA	Delaware	126	110	109	107	105	101	107	105	101	66,631
PA	Erie	105	89	88	87	85	83	87	85	83	496,938
PA	Franklin	114	92	91	90	89	87	90	89	87	804,219
PA	Lackawanna	110	96	95	94	92	89	94	92	89	433,203
PA	Lancaster	125	109	108	106	104	100	106	104	100	671,780
PA	Lawrence	101	90	89	87	85	82	87	85	82	827,645
PA	Lehigh	114	96	95	93	91	88	93	91	88	553,124
PA	Luzerne	110	90	89	88	86	84	88	86	84	1,321,864
PA	Lycoming	91	75	74	74	73	71	74	73	71	378,977
PA	Mercer	111	98	97	95	93	90	95	93	90	325,824
PA	Montgomery	122	104	103	101	99	96	101	99	96	1,951,598
PA	Northampton	116	98	97	96	94	91	96	94	91	421,353
PA	Perry	103	86	85	84	82	79	84	82	79	2,300,664

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
PA	Philadelphia	130	120	119	119	118	117	119	118	117	1,203,789
PA	Washington	117	90	89	88	86	84	88	86	84	825,380
PA	Westmoreland	125	107	106	104	102	99	104	102	99	83,941
PA	York	109	93	92	91	89	86	91	89	86	1,487,536
RI	Kent	133	114	113	110	108	105	110	108	105	874,866
RI	Providence	117	100	99	97	95	92	97	95	92	553,099
SC	Abbeville	93	82	81	79	77	73	79	77	73	107,776
SC	Aiken	104	92	91	89	87	82	89	87	82	307,647
SC	Anderson	114	103	101	98	95	90	98	95	90	778,206
SC	Barnwell	99	85	84	83	81	77	83	81	77	259,462
SC	Berkeley	94	84	83	82	80	77	82	80	77	493,819
SC	Charleston	102	94	93	91	89	87	91	89	87	133,793
SC	Cherokee	106	93	92	89	86	81	89	86	81	52,141
SC	Chester	107	97	96	93	91	86	93	91	86	599,611
SC	Darlington	94	82	81	79	77	73	79	77	73	174,253
SC	Edgefield	93	81	80	78	76	71	78	76	71	22,795
SC	Oconee	92	83	82	79	76	71	79	76	71	416,444
SC	Pickens	107	98	96	93	90	85	93	90	85	677,491
SC	Richland	107	96	95	92	89	83	92	89	83	107,728
SC	Spartanburg	117	106	105	102	99	92	102	99	92	287,529
SC	Union	98	89	88	85	83	79	85	83	79	87,189
SC	Williamsburg	85	74	73	72	70	68	72	70	68	86,915
SC	York	114	103	102	99	96	91	99	96	91	62,254
TN	Anderson	110	93	92	90	88	85	90	88	85	262,798
TN	Blount	124	110	109	106	104	100	106	104	100	182,827
TN	Bradley	106	92	91	88	86	81	88	86	81	71,347
TN	Coffee	105	87	86	85	83	80	85	83	80	441,946
TN	Davidson	110	102	101	101	100	99	101	100	99	502,824
TN	Dickson	120	101	100	99	97	94	99	97	94	541,174
TN	Dyer	112	100	99	97	95	92	97	95	92	1,585,577
TN	Giles	104	93	92	91	89	85	91	89	85	230,082
TN	Hamblen	96	80	79	77	75	73	77	75	73	547,651
TN	Hamilton	113	104	103	101	98	93	101	98	93	224,327
TN	Haywood	97	84	83	82	80	78	82	80	78	678,111
TN	Humphreys	102	86	85	84	82	80	84	82	80	138,053
TN	Jefferson	125	105	104	101	99	95	101	99	95	1,336,449

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
TN	Knox	120	110	109	107	105	102	107	105	102	370,321
TN	Lawrence	93	81	80	78	76	74	78	76	74	204,584
TN	Loudon	112	94	93	91	89	85	91	89	85	186,093
TN	Madison	64	55	54	53	52	50	53	52	50	139,352
TN	Putnam	99	83	82	80	78	76	80	78	76	243,135
TN	Rutherford	95	81	80	78	76	74	78	76	74	161,135
TN	Sevier	111	96	95	93	91	87	93	91	87	596,270
TN	Shelby	128	121	120	118	116	112	118	116	112	423,380
TN	Sullivan	111	99	98	97	95	93	97	95	93	36,414
TN	Sumner	124	108	107	105	103	100	105	103	100	81,306
TN	Williamson	110	99	98	96	94	91	96	94	91	38,759
TN	Wilson	108	97	96	94	92	88	94	92	88	181,835
TX	Bexar	121	118	117	116	114	111	116	114	111	336,523
TX	Brazoria	148	139	138	137	136	134	137	136	134	63,306
TX	Cameron	81	81	81	81	81	81	81	81	81	6,282
TX	Collin	132	120	119	118	116	112	118	116	112	217,881
TX	Dallas	134	123	122	121	119	116	121	119	116	209,274
TX	Denton	139	124	123	121	119	114	121	119	114	79,332
TX	Ellis	118	112	111	110	108	106	110	108	106	713,968
TX	Galveston	182	171	170	169	168	166	169	168	166	89,123
TX	Gregg	139	129	128	127	125	122	127	125	122	252,913
TX	Harris	189	175	175	176	176	177	175	176	176	56,558
TX	Hidalgo	78	77	77	77	77	77	77	77	77	212,907
TX	Jefferson	139	129	128	127	126	124	127	126	124	249,238
TX	Nueces	115	112	111	111	111	111	111	111	111	171,380
TX	Orange	121	112	111	111	110	108	111	110	108	993,529
TX	Smith	109	101	100	98	96	94	98	96	94	20,539
TX	Tarrant	133	120	119	117	115	112	117	115	112	262,852
TX	Travis	112	106	105	102	100	97	102	100	97	396,685
TX	Victoria	95	91	90	90	89	89	90	89	89	1,185,394
TX	Webb	90	90	90	90	90	90	90	90	90	277,776
VA	Alexandria City	124	108	108	108	107	106	108	107	106	211,707
VA	Arlington	123	107	107	107	106	105	107	106	105	216,935
VA	Caroline	109	92	91	88	86	81	88	86	81	219,039
VA	Charles City	119	102	101	99	97	94	99	97	94	328,149
VA	Chesterfield	114	97	96	94	92	88	94	92	88	121,003

Appendix C: One-hour and Eight-hour County Design Values

Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
VA	Fairfax	124	107	106	104	102	100	104	102	100	103,877
VA	Fauquier	97	75	74	73	71	69	73	71	69	248,253
VA	Frederick	102	80	79	78	76	74	78	76	74	86,088
VA	Hampton City	109	98	97	96	94	90	96	94	90	247,052
VA	Hanover	124	107	105	102	99	93	102	99	93	178,386
VA	Henrico	115	101	99	96	94	89	96	94	89	207,949
VA	Henry	101	82	81	79	77	74	79	77	74	146,568
VA	Madison	99	81	80	79	77	75	79	77	75	80,298
VA	Prince William	110	91	90	88	86	83	88	86	83	35,233
VA	Roanoke	94	81	80	78	76	72	78	76	72	468,973
VA	Stafford	110	91	90	88	86	82	88	86	82	69,120
VA	Suffolk City	108	91	90	88	86	83	88	86	83	192,493
VA	Wythe	94	72	71	70	68	66	70	68	66	834,054
VT	Bennington	99	89	88	87	85	81	87	85	81	851,659
VT	Chittenden	85	77	76	75	74	72	75	74	72	281,131
WI	Brown	108	99	98	97	95	93	97	95	93	106,107
WI	Columbia	104	97	96	95	93	91	95	93	91	462,361
WI	Dane	97	90	89	89	88	86	89	88	86	113,269
WI	Dodge	93	85	84	83	82	80	83	82	80	503,341
WI	Door	127	113	112	111	109	106	111	109	106	151,309
WI	Florence	80	74	73	73	72	70	73	72	70	250,836
WI	Fond Du Lac	96	88	87	87	86	84	87	86	84	65,797
WI	Jefferson	94	86	85	84	83	81	84	83	81	74,361
WI	Kenosha	129	117	116	114	112	110	114	112	110	182,132
WI	Kewaunee	121	109	108	106	104	102	106	104	102	427,239
WI	Manitowoc	126	113	112	110	108	106	110	108	106	736,014
WI	Marathon	84	79	78	77	76	75	77	76	75	729,268
WI	Milwaukee	126	118	117	116	114	112	116	114	112	692,134
WI	Oneida	78	74	73	72	71	70	72	71	70	606,900
WI	Outagamie	98	92	91	90	89	87	90	89	87	818,584
WI	Ozaukee	127	118	117	117	116	114	117	116	114	111,183
WI	Polk	85	82	81	80	79	78	80	79	78	170,936
WI	Racine	119	108	107	106	104	102	106	104	102	101,154
WI	Rock	103	95	94	93	92	90	93	92	90	757,027
WI	Sauk	90	85	84	83	82	80	83	82	80	123,372
WI	Sheboygan	123	109	108	107	105	103	107	105	103	215,686

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Table C-11. One-hour county design values (ppb) and population

State	County	dv1	bg1	nt110	t107	t110	t120	u107	u110	u120	Pop'n.
WI	St Croix	88	85	84	84	83	81	84	83	81	61,236
WI	Vernon	85	81	80	80	79	78	80	79	78	51,372
WI	Walworth	100	92	91	90	89	87	90	89	87	48,741
WI	Washington	106	95	94	93	91	89	93	91	89	115,400
WI	Waukesha	109	99	98	97	95	93	97	95	93	863,518
WI	Winnebago	98	91	90	89	88	86	89	88	86	50,871
WV	Cabell	122	98	97	95	93	91	95	93	91	403,662
WV	Greenbrier	99	73	72	71	70	68	71	70	68	118,710
WV	Hancock	106	92	91	90	89	87	90	89	87	120,284
WV	Kanawha	110	91	90	88	86	82	88	86	82	339,574
WV	Ohio	107	85	84	83	81	79	83	81	79	264,806
WV	Wood	116	89	88	87	85	83	87	85	83	227,813

Table C-12. Eight-hour county design values (ppb) and population

All 8-hour county design values are listed in this table. The design value headings in the this table are defined as follows:

dv8—measured 8-hour design value 1995-1997.

bg8—projected design value in 2007 after ROTR.

nt810—interpolated design value in 2010 without Tier 2/Sulfur controls.

t807—projected design values in 2007 after ROTR and Tier 2/Sulfur (OMS4).

t810—interpolated design values in 2010 after ROTR and Tier 2/Sulfur.

t820—projected design values in 2020 after ROTR and Tier 2/Sulfur (OMS3).

u807—interpolated design values in 2007 after ROTR and Tier 2/Sulfur.

u810—interpolated design values in 2010 after ROTR and Tier 2/Sulfur.

u820—interpolated design values in 2020 after ROTR and Tier 2/Sulfur.

The “u” values correspond to today’s proposal. The “t” values correspond to OMS3 and OMS4. For discussing the effects of today’s proposal on design values, we projected county design values using the rollback method for three modeling runs: 2007 post ROTR, OMS3, and OMS4. All other design values have been linearly interpolated based on NO_x. See the main text for further details.

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
AL	Clay	86	72	71	70	68	66	70	68	66	13,252
AL	Elmore	77	65	64	63	61	59	63	61	59	49,210

Appendix C: One-hour and Eight-hour County Design Values

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
AL	Geneva	69	63	62	61	60	58	61	60	58	23,647
AL	Jefferson	92	82	81	80	78	74	80	78	74	651,525
AL	Lawrence	81	70	69	68	67	65	68	67	65	31,513
AL	Madison	84	73	72	71	69	66	71	69	66	238,912
AL	Mobile	79	75	74	73	72	70	73	72	70	378,643
AL	Montgomery	70	63	62	61	59	57	61	59	57	209,085
AL	Shelby	95	83	82	80	78	74	80	78	74	99,358
AL	Sumter	66	60	59	58	57	55	58	57	55	16,174
AR	Crittenden	95	87	86	85	83	81	85	83	81	49,939
AR	Montgomery	67	63	62	61	60	58	61	60	58	7,841
AR	Newton	71	66	65	64	63	61	64	63	61	7,666
AR	Pulaski	81	79	78	77	75	72	77	75	72	349,660
CT	Fairfield	104	94	93	93	92	91	93	92	91	827,645
CT	Hartford	89	78	77	76	75	73	76	75	73	851,783
CT	Litchfield	94	81	80	79	77	75	79	77	75	174,092
CT	Middlesex	98	84	83	82	80	78	82	80	78	143,196
CT	New Haven	107	93	92	91	89	87	91	89	87	804,219
CT	New London	101	88	87	86	84	82	86	84	82	254,957
CT	Tolland	91	79	78	77	76	74	77	76	74	128,699
DC	District of Columbia	94	80	79	79	79	79	79	79	79	606,900
DE	Kent	94	79	78	77	75	72	77	75	72	110,993
DE	New Castle	99	83	82	81	79	76	81	79	76	441,946
DE	Sussex	93	81	80	79	77	74	79	77	74	113,229
FL	Brevard	71	69	68	68	66	64	68	66	64	398,978
FL	Broward	69	69	69	69	69	69	69	69	69	1,255,488
FL	Duval	81	79	78	77	75	72	77	75	72	672,971
FL	Escambia	84	82	81	81	79	77	81	79	77	262,798
FL	Hillsborough	82	83	82	81	80	78	81	80	78	834,054
FL	Lee	71	70	69	69	68	66	69	68	66	335,113
FL	Leon	66	61	60	59	57	53	59	57	53	192,493
FL	Manatee	75	76	75	74	72	70	74	72	70	211,707
FL	Orange	78	78	77	76	74	70	76	74	70	677,491
FL	Osceola	72	71	70	69	67	64	69	67	64	107,728
FL	Palm Beach	67	63	62	61	59	57	61	59	57	863,518
FL	Pasco	75	73	72	71	69	66	71	69	66	281,131
FL	Pinellas	73	72	71	70	69	67	70	69	67	851,659
FL	Polk	74	72	71	70	68	66	70	68	66	405,382
FL	Sarasota	76	76	75	74	72	70	74	72	70	277,776
FL	Seminole	72	70	69	67	65	62	67	65	62	287,529
FL	St Johns	72	69	68	67	65	62	67	65	62	83,829
FL	St Lucie	64	62	61	61	59	57	61	59	57	150,171

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Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
FL	Volusia	69	67	66	64	62	59	64	62	59	370,712
GA	Chatham	72	66	65	64	63	61	64	63	61	216,935
GA	DeKalb	100	86	85	82	79	74	82	79	74	545,837
GA	Fannin	76	66	65	63	61	58	63	61	58	15,992
GA	Fulton	110	95	94	91	89	84	91	89	84	648,951
GA	Glynn	75	70	69	68	67	65	68	67	65	62,496
GA	Gwinnett	91	78	77	74	71	66	74	71	66	352,910
GA	Muscogee	83	75	74	71	69	64	71	69	64	179,278
GA	Paulding	89	77	76	73	71	67	73	71	67	41,611
GA	Richmond	87	77	76	74	72	68	74	72	68	189,719
GA	Rockdale	106	90	89	86	83	78	86	83	78	54,091
IA	Linn	62	59	58	58	57	56	58	57	56	168,767
IA	Polk	66	62	61	61	60	59	61	60	59	327,140
IA	Scott	78	74	73	73	72	71	73	72	71	150,979
IA	Van Buren	68	63	62	61	60	59	61	60	59	7,676
IL	Adams	74	67	66	65	64	62	65	64	62	66,090
IL	Champaign	81	68	67	67	66	64	67	66	64	173,025
IL	Cook	91	90	90	91	91	93	90	91	92	5,105,067
IL	Du Page	75	70	70	70	69	69	70	69	69	781,666
IL	Effingham	81	67	66	66	65	63	66	65	63	31,704
IL	Jersey	84	72	71	70	68	64	70	68	64	20,539
IL	Kane	85	75	74	74	73	72	74	73	72	317,471
IL	Lake	86	81	81	81	80	79	81	80	79	516,418
IL	Macon	83	69	68	67	66	64	67	66	64	117,206
IL	Macoupin	83	69	68	67	65	63	67	65	63	47,679
IL	Madison	93	79	78	76	74	71	76	74	71	249,238
IL	McHenry	85	77	76	76	75	73	76	75	73	183,241
IL	Peoria	80	71	70	69	68	66	69	68	66	182,827
IL	Randolph	78	69	68	67	66	64	67	66	64	34,583
IL	Rock Island	70	65	64	64	63	62	64	63	62	148,723
IL	Sangamon	76	65	64	63	61	59	63	61	59	178,386
IL	St Clair	78	70	69	69	68	66	69	68	66	262,852
IL	Will	79	68	67	67	66	65	67	66	65	357,313
IL	Winnebago	79	71	70	70	69	68	70	69	68	252,913
IN	Allen	90	81	80	79	78	76	79	78	76	300,836
IN	Clark	92	76	75	74	73	72	74	73	72	87,777
IN	Elkhart	90	79	78	78	77	76	78	77	76	156,198
IN	Floyd	90	77	77	77	76	76	77	76	76	64,404
IN	Hamilton	97	84	83	83	82	82	83	82	82	108,936
IN	Hancock	95	83	82	82	81	80	82	81	80	45,527
IN	La Porte	104	93	92	92	91	89	92	91	89	107,066

Appendix C: One-hour and Eight-hour County Design Values

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
IN	Lake	95	86	85	85	84	83	85	84	83	475,594
IN	Madison	91	79	78	78	76	74	78	76	74	130,669
IN	Marion	95	82	81	80	79	78	80	79	78	797,159
IN	Porter	96	85	84	84	83	81	84	83	81	128,932
IN	St. Joseph	91	80	79	79	78	77	79	78	77	247,052
IN	Vanderburgh	93	80	79	78	77	76	78	77	76	165,058
IN	Vigo	88	72	71	70	69	68	70	69	68	106,107
IN	Warrick	93	77	76	75	74	72	75	74	72	44,920
KS	Miami	74	72	71	71	70	69	71	70	69	23,466
KS	Pawnee	71	71	71	71	71	71	71	71	71	7,555
KS	Sedgwick	74	72	71	71	70	69	71	70	69	403,662
KS	Wyandotte	85	83	82	82	81	81	82	81	81	161,993
KY	Bell	76	62	61	60	59	57	60	59	57	31,506
KY	Boone	82	68	67	67	66	65	67	66	65	57,589
KY	Boyd	85	69	68	67	66	65	67	66	65	51,150
KY	Bullitt	85	70	69	68	67	66	68	67	66	47,567
KY	Campbell	90	79	78	77	76	74	77	76	74	83,866
KY	Christian	80	66	65	65	64	62	65	64	62	68,941
KY	Daviess	87	73	72	72	71	70	72	71	70	87,189
KY	Edmonson	82	68	67	67	66	64	67	66	64	10,357
KY	Fayette	85	75	74	74	73	73	74	73	73	225,366
KY	Graves	74	60	59	59	58	56	59	58	56	33,550
KY	Greenup	80	64	63	63	62	60	63	62	60	36,742
KY	Hancock	89	67	66	66	65	63	66	65	63	7,864
KY	Hardin	81	62	61	61	60	58	61	60	58	89,240
KY	Henderson	86	69	68	68	67	65	68	67	65	43,044
KY	Jefferson	91	75	75	75	74	74	75	74	74	664,937
KY	Jessamine	80	66	65	64	63	61	64	63	61	30,508
KY	Kenton	90	78	77	77	76	74	77	76	74	142,031
KY	Lawrence	70	53	52	52	51	50	52	51	50	13,998
KY	Livingston	86	72	71	71	70	69	71	70	69	9,062
KY	McCracken	80	65	64	64	63	61	64	63	61	62,879
KY	McLean	83	69	68	67	66	65	67	66	65	9,628
KY	Oldham	87	74	73	73	72	70	73	72	70	33,263
KY	Perry	69	58	57	57	56	54	57	56	54	30,283
KY	Pike	74	62	61	60	58	56	60	58	56	72,583
KY	Pulaski	76	61	60	60	59	58	60	59	58	49,489
KY	Scott	78	68	67	66	65	63	66	65	63	23,867
KY	Simpson	83	72	71	70	69	67	70	69	67	15,145
LA	Ascension	87	81	80	80	79	77	80	79	77	58,214
LA	Beauregard	75	69	68	68	67	66	68	67	66	30,083

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Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
LA	Bossier	79	74	73	73	72	70	73	72	70	86,088
LA	Caddo	82	77	76	75	74	72	75	74	72	248,253
LA	Calcasieu	85	77	76	76	75	75	76	75	75	168,134
LA	East Baton Rouge	95	88	87	86	84	81	86	84	81	380,105
LA	Grant	75	69	68	68	67	66	68	67	66	17,526
LA	Iberville	96	91	90	90	89	88	90	89	88	31,049
LA	Jefferson	83	80	79	79	78	78	79	78	78	448,306
LA	Lafayette	84	79	78	77	76	74	77	76	74	164,762
LA	Lafourche	85	81	81	81	80	79	81	80	79	85,860
LA	Livingston	88	82	81	80	78	76	80	78	76	70,526
LA	Orleans	71	66	65	65	64	63	65	64	63	496,938
LA	Ouachita	77	73	72	72	71	70	72	71	70	142,191
LA	Pointe Coupee	83	77	76	76	74	72	76	74	72	22,540
LA	St Bernard	80	75	74	74	73	72	74	73	72	66,631
LA	St Charles	81	77	76	76	75	75	76	75	75	42,437
LA	St James	84	79	78	77	76	75	77	76	75	20,879
LA	St John The Baptist	82	77	76	76	75	74	76	75	74	39,996
LA	St Mary	81	76	75	75	74	73	75	74	73	58,086
LA	West Baton Rouge	86	80	79	78	76	73	78	76	73	19,419
MA	Barnstable	100	89	88	87	85	83	87	85	83	186,605
MA	Berkshire	77	67	66	65	64	62	65	64	62	139,352
MA	Bristol	97	84	83	82	80	78	82	80	78	506,325
MA	Essex	89	79	78	77	75	73	77	75	73	670,080
MA	Hampden	89	81	80	80	79	78	80	79	78	456,310
MA	Hampshire	97	87	86	85	84	82	85	84	82	146,568
MA	Middlesex	87	76	75	75	73	71	75	73	71	1,398,468
MA	Plymouth	71	62	61	61	60	58	61	60	58	435,276
MA	Suffolk	76	70	70	70	70	70	70	70	70	663,906
MA	Worcester	87	75	74	73	71	69	73	71	69	709,705
MD	Anne Arundel	107	93	92	90	88	86	90	88	86	427,239
MD	Baltimore	96	82	81	79	77	75	79	77	75	692,134
MD	Baltimore City	103	93	92	91	90	89	91	90	89	736,014
MD	Calvert	85	69	68	67	65	63	67	65	63	51,372
MD	Carroll	93	76	75	74	73	71	74	73	71	123,372
MD	Cecil	110	92	91	90	88	85	90	88	85	71,347
MD	Charles	93	77	76	75	73	71	75	73	71	101,154
MD	Harford	107	93	92	91	89	86	91	89	86	182,132
MD	Kent	96	82	81	80	78	76	80	78	76	17,842
MD	Montgomery	93	78	77	76	74	72	76	74	72	757,027
MD	Prince George's	100	86	85	84	82	80	84	82	80	729,268
ME	Cumberland	94	83	82	80	78	76	80	78	76	243,135

Appendix C: One-hour and Eight-hour County Design Values

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
ME	Hancock	83	72	71	70	69	67	70	69	67	46,948
ME	Kennebec	75	67	66	66	64	62	66	64	62	115,904
ME	Knox	87	76	75	74	72	70	74	72	70	36,310
ME	Oxford	59	53	52	52	50	48	52	50	48	52,602
ME	Penobscot	73	65	64	64	62	60	64	62	60	146,601
ME	Piscataquis	64	58	57	56	55	53	56	55	53	18,653
ME	Sagadahoc	95	82	81	80	78	76	80	78	76	33,535
ME	Somerset	69	62	61	61	59	57	61	59	57	49,767
ME	York	96	85	84	83	81	79	83	81	79	164,587
MI	Allegan	98	86	85	85	84	83	85	84	83	90,509
MI	Benzie	88	79	78	78	77	75	78	77	75	12,200
MI	Berrien	98	86	85	85	84	82	85	84	82	161,378
MI	Cass	94	83	82	81	80	78	81	80	78	49,477
MI	Clinton	74	64	63	63	62	61	63	62	61	57,883
MI	Genesee	84	75	75	75	74	73	75	74	73	430,459
MI	Huron	82	73	72	72	71	69	72	71	69	34,951
MI	Ingham	83	74	73	73	72	71	73	72	71	281,912
MI	Kalamazoo	87	75	74	74	73	71	74	73	71	223,411
MI	Kent	88	79	78	77	76	75	77	76	75	500,631
MI	Lenawee	83	75	74	74	73	71	74	73	71	91,476
MI	Macomb	91	82	82	82	81	81	82	81	81	717,400
MI	Mason	98	88	87	87	86	84	87	86	84	25,537
MI	Muskegon	99	89	88	87	86	84	87	86	84	158,983
MI	Oakland	78	71	70	70	69	68	70	69	68	1,083,592
MI	Ottawa	84	75	74	73	72	71	73	72	71	187,768
MI	St. Clair	92	84	83	82	81	80	82	81	80	145,607
MI	Washtenaw	83	74	73	72	71	70	72	71	70	282,937
MI	Wayne	88	80	79	79	79	79	79	79	79	2,111,687
MN	Anoka	81	79	79	79	78	78	79	78	78	243,641
MN	Dakota	68	66	66	66	65	65	66	65	65	275,227
MN	Lake	63	63	63	63	63	63	63	63	63	10,415
MN	St Louis	66	66	66	66	66	66	66	66	66	198,213
MN	Washington	74	72	71	71	70	69	71	70	69	145,896
MO	Clay	94	90	89	88	86	84	88	86	84	153,411
MO	Greene	78	70	69	68	66	63	68	66	63	207,949
MO	Jackson	73	70	69	69	68	66	69	68	66	633,232
MO	Jefferson	90	83	82	79	78	76	79	78	76	171,380
MO	Monroe	84	78	77	76	74	72	76	74	72	9,104
MO	Platte	86	81	81	82	81	79	82	81	79	57,867
MO	St Louis City	83	76	75	75	74	73	75	74	73	396,685
MO	St. Charles	100	90	89	87	85	82	87	85	82	212,907

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Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
MO	St. Louis	88	78	77	75	74	72	75	74	72	993,529
MO	Ste. Genevieve	87	77	76	75	73	70	75	73	70	16,037
MS	Adams	77	74	73	73	72	70	73	72	70	35,356
MS	Choctaw	55	49	48	48	47	46	48	47	46	9,071
MS	DeSoto	88	84	83	83	82	81	83	82	81	67,910
MS	Hancock	80	76	75	74	73	72	74	73	72	31,760
MS	Hinds	76	70	69	68	67	65	68	67	65	254,441
MS	Jackson	86	88	87	87	86	85	87	86	85	115,243
MS	Lauderdale	72	65	64	63	62	60	63	62	60	75,555
MS	Lee	75	68	67	66	65	63	66	65	63	65,581
MS	Madison	77	71	70	69	68	67	69	68	67	53,794
MS	Sharkey	80	74	73	73	72	71	73	72	71	7,066
MS	Warren	76	71	70	70	69	68	70	69	68	47,880
NC	a Alexander	79	71	70	68	66	62	68	66	62	27,544
NC	Buncombe	75	67	66	65	63	59	65	63	59	174,821
NC	Caldwell	79	71	70	68	66	63	68	66	63	70,709
NC	Camden	83	74	73	72	70	68	72	70	68	5,904
NC	Caswell	89	74	73	71	69	66	71	69	66	20,693
NC	Chatham	85	71	70	68	66	63	68	66	63	38,759
NC	Cumberland	87	79	78	76	74	69	76	74	69	274,566
NC	Davie	88	78	77	75	73	69	75	73	69	27,859
NC	Duplin	72	65	64	62	60	58	62	60	58	39,995
NC	Durham	83	74	73	71	69	64	71	69	64	181,835
NC	Edgecombe	84	76	75	72	70	66	72	70	66	56,558
NC	Forsyth	89	80	79	77	75	71	77	75	71	265,878
NC	Franklin	86	73	72	69	67	63	69	67	63	36,414
NC	Granville	94	83	82	79	76	71	79	76	71	38,345
NC	Guilford	85	76	75	73	71	66	73	71	66	347,420
NC	Haywood	85	75	74	72	70	67	72	70	67	46,942
NC	Johnston	87	76	75	73	71	67	73	71	67	81,306
NC	Lincoln	86	77	76	73	71	67	73	71	67	50,319
NC	Martin	75	65	64	63	61	58	63	61	58	25,078
NC	Mecklenburg	97	94	93	90	87	82	90	87	82	511,433
NC	New Hanover	79	72	71	70	68	66	70	68	66	120,284
NC	Northampton	86	71	70	69	67	64	69	67	64	20,798
NC	Person	84	68	67	65	63	60	65	63	60	30,180
NC	Pitt	88	77	76	74	72	68	74	72	68	107,924
NC	Rockingham	84	73	72	70	68	65	70	68	65	86,064
NC	Rowan	93	82	81	79	77	73	79	77	73	110,605
NC	Swain	66	57	56	55	53	51	55	53	51	11,268
NC	Wake	89	82	81	78	75	70	78	75	70	423,380

Appendix C: One-hour and Eight-hour County Design Values

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
NC	Yancey	84	71	70	69	67	65	69	67	65	15,419
ND	Cass	67	67	67	67	67	67	67	67	67	102,874
NE	Douglas	67	65	64	64	63	63	64	63	63	416,444
NE	Lancaster	56	54	54	54	53	53	54	53	53	213,641
NH	Belknap	64	57	56	56	55	53	56	55	53	49,216
NH	Carroll	62	55	54	53	52	51	53	52	51	35,410
NH	Cheshire	74	66	65	64	63	61	64	63	61	70,121
NH	Coos	77	70	69	67	65	63	67	65	63	34,828
NH	Grafton	57	51	50	50	49	47	50	49	47	74,929
NH	Hillsborough	87	77	76	75	74	72	75	74	72	336,073
NH	Merrimack	71	63	62	62	61	60	62	61	60	120,005
NH	Rockingham	95	86	85	84	82	80	84	82	80	245,845
NH	Strafford	78	71	70	69	68	66	69	68	66	104,233
NH	Sullivan	71	64	63	62	61	59	62	61	59	38,592
NJ	Atlantic	100	87	86	85	83	81	85	83	81	224,327
NJ	Bergen	94	84	83	82	81	80	82	81	80	825,380
NJ	Camden	106	92	91	90	88	85	90	88	85	502,824
NJ	Cumberland	93	78	77	76	74	71	76	74	71	138,053
NJ	Essex	92	79	78	78	77	76	78	77	76	778,206
NJ	Gloucester	105	92	91	90	88	86	90	88	86	230,082
NJ	Hudson	98	94	94	95	94	94	95	94	94	553,099
NJ	Hunterdon	98	83	82	81	79	76	81	79	76	107,776
NJ	Mercer	101	88	87	86	84	82	86	84	82	325,824
NJ	Middlesex	103	89	88	87	86	84	87	86	84	671,780
NJ	Monmouth	100	87	86	85	83	81	85	83	81	553,124
NJ	Morris	100	84	83	82	80	78	82	80	78	421,353
NJ	Ocean	108	92	91	89	87	84	89	87	84	433,203
NJ	Union	83	71	70	69	68	66	69	68	66	493,819
NY	Albany	81	72	71	71	70	68	71	70	68	292,594
NY	Bronx	95	97	97	98	98	99	97	98	98	1,203,789
NY	Chautauqua	85	74	73	72	71	69	72	71	69	141,895
NY	Chemung	73	65	64	63	62	60	63	62	60	95,195
NY	Dutchess	90	78	77	76	74	72	76	74	72	259,462
NY	Erie	76	66	65	65	64	63	65	64	63	968,532
NY	Essex	86	78	77	76	74	72	76	74	72	37,152
NY	Hamilton	75	67	66	65	64	62	65	64	62	5,279
NY	Herkimer	70	62	61	61	60	58	61	60	58	65,797
NY	Jefferson	88	79	78	77	75	73	77	75	73	110,943
NY	Kings	88	79	78	77	76	74	77	76	74	2,300,664
NY	Madison	77	69	68	67	66	64	67	66	64	69,120
NY	Monroe	81	74	73	73	72	70	73	72	70	713,968

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Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
NY	Niagara	85	77	76	76	75	74	76	75	74	220,756
NY	Oneida	72	64	63	63	62	60	63	62	60	250,836
NY	Onondaga	79	70	69	69	68	66	69	68	66	468,973
NY	Orange	91	79	78	77	76	74	77	76	74	307,647
NY	Putnam	90	78	77	76	74	72	76	74	72	83,941
NY	Queens	91	90	90	90	90	92	89	90	91	1,951,598
NY	Richmond	103	92	91	90	88	86	90	88	86	378,977
NY	Saratoga	76	68	67	67	66	64	67	66	64	181,276
NY	Schenectady	74	66	65	65	64	62	65	64	62	149,285
NY	Suffolk	102	89	88	86	84	82	86	84	82	1,321,864
NY	Ulster	82	72	71	70	68	66	70	68	66	165,304
NY	Wayne	83	75	74	73	72	71	73	72	71	89,123
NY	Westchester	94	82	81	80	79	77	80	79	77	874,866
OH	Allen	89	75	74	74	73	72	74	73	72	109,755
OH	Ashtabula	85	74	73	73	72	70	73	72	70	99,821
OH	Butler	93	77	76	76	75	74	76	75	74	291,479
OH	Clark	93	79	78	77	76	74	77	76	74	147,548
OH	Clermont	89	76	75	75	74	72	75	74	72	150,187
OH	Clinton	97	80	79	78	77	75	78	77	75	35,415
OH	Cuyahoga	88	77	76	75	74	73	75	74	73	1,412,140
OH	Franklin	87	73	72	71	70	69	71	70	69	961,437
OH	Hamilton	95	87	87	88	88	88	88	88	88	866,228
OH	Jefferson	84	71	70	69	68	66	69	68	66	80,298
OH	Knox	91	77	76	76	75	73	76	75	73	47,473
OH	Lake	99	86	85	85	84	82	85	84	82	215,499
OH	Lawrence	82	65	64	64	63	61	64	63	61	61,834
OH	Licking	92	78	77	77	76	74	77	76	74	128,300
OH	Logan	86	73	72	71	70	68	71	70	68	42,310
OH	Lorain	87	78	77	76	75	74	76	75	74	271,126
OH	Lucas	89	80	79	79	78	76	79	78	76	462,361
OH	Madison	91	76	75	74	73	71	74	73	71	37,068
OH	Mahoning	90	78	77	77	75	73	77	75	73	264,806
OH	Medina	89	78	77	77	76	74	77	76	74	122,354
OH	Miami	88	75	74	73	72	71	73	72	71	93,182
OH	Montgomery	91	76	75	75	74	73	75	74	73	573,809
OH	Portage	88	77	76	76	74	72	76	74	72	142,585
OH	Preble	86	70	69	68	67	65	68	67	65	40,113
OH	Stark	88	76	75	75	74	73	75	74	73	367,585
OH	Summit	91	80	79	79	78	76	79	78	76	514,990
OH	Trumbull	93	81	80	79	77	75	79	77	75	227,813
OH	Warren	99	83	82	81	79	77	81	79	77	113,909

Appendix C: One-hour and Eight-hour County Design Values

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
OH	Washington	89	69	68	67	66	64	67	66	64	62,254
OK	Cleveland	79	78	77	76	74	72	76	74	72	174,253
OK	Comanche	60	57	56	56	55	54	56	55	54	111,486
OK	Mc Clain	77	74	73	72	71	69	72	71	69	22,795
OK	Oklahoma	83	83	82	81	80	78	81	80	78	599,611
OK	Tulsa	88	87	86	86	85	84	86	85	84	503,341
PA	Allegheny	105	95	94	94	93	91	94	93	91	1,336,449
PA	Beaver	87	76	75	75	74	72	75	74	72	186,093
PA	Berks	92	78	77	76	74	71	76	74	71	336,523
PA	Blair	90	75	74	73	72	70	73	72	70	130,542
PA	Bucks	102	86	85	83	81	79	83	81	79	541,174
PA	Cambria	88	74	73	72	71	69	72	71	69	163,029
PA	Dauphin	88	75	74	72	70	67	72	70	67	237,813
PA	Delaware	100	87	86	85	83	81	85	83	81	547,651
PA	Erie	87	75	74	73	72	70	73	72	70	275,572
PA	Franklin	86	71	70	69	68	66	69	68	66	121,082
PA	Lackawanna	86	75	74	73	72	70	73	72	70	219,039
PA	Lancaster	96	83	82	81	79	76	81	79	76	422,822
PA	Lawrence	84	74	73	72	70	68	72	70	68	96,246
PA	Lehigh	95	80	79	78	76	73	78	76	73	291,130
PA	Luzerne	90	74	73	72	71	69	72	71	69	328,149
PA	Lycoming	73	61	60	60	59	57	60	59	57	118,710
PA	Mercer	92	81	80	78	76	74	78	76	74	121,003
PA	Montgomery	97	83	82	81	79	76	81	79	76	678,111
PA	Northampton	90	76	75	74	72	70	74	72	70	247,105
PA	Perry	84	70	69	68	66	64	68	66	64	41,172
PA	Philadelphia	102	94	94	94	93	92	94	93	92	1,585,577
PA	Washington	95	74	73	73	71	69	73	71	69	204,584
PA	Westmoreland	88	76	75	74	73	71	74	73	71	370,321
PA	York	87	74	73	72	70	68	72	70	68	339,574
RI	Kent	96	82	81	79	77	75	79	77	75	161,135
RI	Providence	87	74	73	72	71	69	72	71	69	596,270
SC	a Abbeville	77	70	69	67	65	62	67	65	62	23,862
SC	Aiken	81	73	72	70	68	64	70	68	64	120,940
SC	Anderson	88	79	78	76	74	70	76	74	70	145,196
SC	Barnwell	81	71	70	68	66	64	68	66	64	20,293
SC	Berkeley	71	63	62	61	60	58	61	60	58	128,776
SC	Charleston	76	70	69	68	67	65	68	67	65	295,039
SC	Cherokee	84	74	73	71	69	65	71	69	65	44,506
SC	Chester	87	78	77	75	73	70	75	73	70	32,170
SC	Darlington	78	68	67	66	64	61	66	64	61	61,851

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Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
SC	Edgefield	76	66	65	63	61	58	63	61	58	18,375
SC	Oconee	76	68	67	65	63	59	65	63	59	57,494
SC	Pickens	83	76	75	72	70	66	72	70	66	93,894
SC	Richland	83	74	73	71	69	64	71	69	64	285,720
SC	Spartanburg	86	79	78	75	73	68	75	73	68	226,800
SC	Union	81	73	72	70	68	65	70	68	65	30,337
SC	Williamsburg	70	61	60	59	58	56	59	58	56	36,815
SC	York	82	75	74	72	70	66	72	70	66	131,497
TN	Anderson	87	75	74	72	70	68	72	70	68	68,250
TN	Blount	95	83	82	81	79	76	81	79	76	85,969
TN	Davidson	88	82	81	81	80	79	81	80	79	510,784
TN	Hamilton	90	82	81	79	77	73	79	77	73	285,536
TN	Haywood	82	71	70	69	68	66	69	68	66	19,437
TN	Humphreys	77	65	64	64	63	61	64	63	61	15,795
TN	Jefferson	96	80	79	78	76	73	78	76	73	33,016
TN	Knox	95	85	84	83	81	78	83	81	78	335,749
TN	Putnam	80	67	66	65	64	62	65	64	62	51,373
TN	Rutherford	79	67	66	65	63	61	65	63	61	118,570
TN	Sevier	93	81	80	78	76	73	78	76	73	51,043
TN	Shelby	95	90	89	88	86	84	88	86	84	826,330
TN	Sullivan	88	77	76	76	75	73	76	75	73	143,596
TN	Sumner	99	88	87	86	84	81	86	84	81	103,281
TN	Williamson	88	80	79	78	76	74	78	76	74	81,021
TN	Wilson	90	80	79	78	76	73	78	76	73	67,675
TX	Bexar	87	85	84	84	83	82	84	83	82	1,185,394
TX	Brazoria	92	87	86	86	85	84	86	85	84	191,707
TX	Cameron	66	66	66	66	66	66	66	66	66	260,120
TX	Collin	101	93	92	91	89	87	91	89	87	264,036
TX	Dallas	95	89	88	88	87	85	88	87	85	1,852,810
TX	Denton	104	94	93	92	90	87	92	90	87	273,525
TX	Ellis	82	78	77	76	75	73	76	75	73	85,167
TX	Galveston	105	99	98	98	97	97	98	97	97	217,399
TX	Gregg	91	84	83	83	81	79	83	81	79	104,948
TX	Harris	117	109	109	110	110	111	109	110	110	2,818,199
TX	Hidalgo	56	55	55	55	55	55	55	55	55	383,545
TX	Jefferson	93	86	85	85	84	82	85	84	82	239,397
TX	Nueces	83	81	81	81	81	81	81	81	81	291,145
TX	Orange	86	80	79	79	78	77	79	78	77	80,509
TX	Smith	89	82	81	80	79	77	80	79	77	151,309
TX	Tarrant	97	89	88	87	86	84	87	86	84	1,170,103
TX	Travis	81	77	76	75	74	72	75	74	72	576,407

Appendix C: One-hour and Eight-hour County Design Values

Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cnty pop
TX	Victoria	78	75	74	74	73	73	74	73	73	74,361
TX	Webb	60	60	60	60	60	60	60	60	60	133,239
VA	Alexandria City	87	76	75	75	75	75	75	75	75	111,183
VA	Arlington	91	79	79	79	78	78	79	78	78	170,936
VA	Caroline	84	70	69	67	65	62	67	65	62	19,217
VA	Charles City	90	77	76	75	73	70	75	73	70	6,282
VA	Chesterfield	87	74	73	71	69	67	71	69	67	209,274
VA	Fairfax	92	79	78	78	76	74	78	76	74	818,584
VA	Fauquier	81	64	63	62	61	59	62	61	59	48,741
VA	Frederick	84	67	66	65	63	61	65	63	61	45,723
VA	Hampton City	87	78	77	76	74	72	76	74	72	133,793
VA	Hanover	90	77	76	74	72	68	74	72	68	63,306
VA	Henrico	90	77	76	74	72	69	74	72	69	217,881
VA	Henry	82	67	66	64	62	60	64	62	60	56,942
VA	Madison	86	71	70	69	67	65	69	67	65	11,949
VA	Prince William	88	73	72	71	69	67	71	69	67	215,686
VA	Roanoke	78	66	65	64	62	59	64	62	59	79,332
VA	Stafford	86	69	68	67	65	63	67	65	63	61,236
VA	Suffolk City	82	70	69	68	66	63	68	66	63	52,141
VA	Wythe	78	61	60	59	58	56	59	58	56	25,466
VT	Bennington	79	71	70	69	67	65	69	67	65	35,845
VT	Chittenden	69	63	62	61	60	59	61	60	59	131,761
WI	Brown	82	75	74	74	73	71	74	73	71	194,594
WI	Columbia	81	76	75	74	73	71	74	73	71	45,088
WI	Dane	79	74	73	73	72	70	73	72	70	367,085
WI	Dodge	78	72	71	71	70	68	71	70	68	76,559
WI	Door	92	83	82	81	80	78	81	80	78	25,690
WI	Florence	64	60	59	59	58	57	59	58	57	4,590
WI	Fond Du Lac	79	73	72	72	71	70	72	71	70	90,083
WI	Jefferson	80	73	72	72	71	69	72	71	69	67,783
WI	Kenosha	96	88	87	86	85	83	86	85	83	128,181
WI	Kewaunee	93	84	83	82	81	79	82	81	79	18,878
WI	Manitowoc	95	85	84	83	82	80	83	82	80	80,421
WI	Marathon	71	67	66	66	65	63	66	65	63	115,400
WI	Milwaukee	94	89	88	87	86	84	87	86	84	959,275
WI	Oneida	64	61	60	59	58	57	59	58	57	31,679
WI	Outagamie	80	75	74	74	73	71	74	73	71	140,510
WI	Ozaukee	98	94	93	93	92	90	93	92	90	72,831
WI	Polk	69	66	65	65	64	63	65	64	63	34,773
WI	Racine	92	85	84	84	82	80	84	82	80	175,034
WI	Rock	85	78	77	77	76	75	77	76	75	139,510

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Table C-12. Eight-hour county design values (ppb) and population

State	County	dv8	bg8	nt810	t807	t810	t820	u807	u810	u820	cntypop
WI	Sauk	74	70	69	68	67	66	68	67	66	46,975
WI	Sheboygan	92	83	82	81	80	79	81	80	79	103,877
WI	St Croix	67	65	64	64	63	62	64	63	62	50,251
WI	Vernon	69	66	65	65	64	63	65	64	63	25,617
WI	Walworth	83	77	76	76	75	73	76	75	73	75,000
WI	Washington	80	74	73	73	72	70	73	72	70	95,328
WI	Waukesha	81	75	74	73	72	70	73	72	70	304,715
WI	Winnebago	81	76	75	74	73	71	74	73	71	140,320
WV	Cabell	88	71	70	69	68	66	69	68	66	96,827
WV	Greenbrier	83	61	60	59	58	57	59	58	57	34,693
WV	Hancock	85	73	72	72	71	69	72	71	69	35,233
WV	Kanawha	81	68	67	65	63	61	65	63	61	207,619
WV	Ohio	86	68	67	67	66	64	67	66	64	50,871
WV	Wood	89	70	69	68	67	65	68	67	65	86,915

Appendix C: One-hour and Eight-hour County Design Values

Table C-13. Metropolitan areas and rural counties with design values that exceeded the 1-hour standard prior to ROTR controls, and were projected to meet but remain within 15% of the 1-hour standard after ROTR controls.

Name	Design Value (ppb)	Pop'n.
Manitowoc WI	113	80,421
Door WI	113	25,690
Mason MI	113	25,537
Kent MD	110	17,842
Sagadahoc ME	109	33,535
Atlanta, GA MSA	124	2,959,500
Barnstable-Yarmouth, MA MSA	118	134,954
Baton Rouge, LA MSA	122	528,261
Birmingham, AL MSA	117	839,942
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	119	5,455,403
Chicago-Gary-Kenosha, IL-IN-WI CMSA	124	8,239,820
Dallas-Fort Worth, TX CMSA	124	4,037,282
Grand Rapids-Muskegon-Holland, MI MSA	121	937,891
Houma, LA MSA	122	182,842
Kansas City, MO-KS MSA	122	1,582,874
Lancaster, PA MSA	109	422,822
Louisville, KY-IN MSA	111	949,012
Milwaukee-Racine, WI CMSA	118	1,607,183
Pittsburgh, PA MSA	121	2,394,811
Providence-Fall River-Warwick, RI-MA MSA	114	1,134,350
St. Louis, MO-IL MSA	117	2,492,348
Springfield, MA MSA	118	587,884
	sum	34,670,204
	MA count	17
	MA sum	34,487,179
	Cnty count	5
	Cnty sum	183,025

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Appendix C. References:

1. U.S. EPA. Green Book Web Site: <http://www.epa.gov/oar/oaqps/greenbook/oytc.html>.